Flight Ask him what he reads too.

Hawaii Roger, will do.

Hawaii Gemini 7, your cuff is full scale but it is not bleeding down.

S/C Okay let's try it.

S/C We are reading 1.76 here.

Hawaii Flight, this is Hawaii Cap Com here. Did you copy.

Flight Affirmative. TCM counts on Juliet Fox 03.

Hawaii Roger, 232. It was at the EOS, it was 232.

Flight Rog.

Hawaii Gemini 7, we have a good blood pressure. Could we have a total reading on your water gun.

S/C 26 83

Hawaii Thank you Gemini 7. We would like to get the pilot to take in more water if possible.

S/C Righto, will do.

Hawaii Thank you, surgeon out.

Hawaii Houston Flight, Hawaii Cap Com.

Flight Go ahead.

Hawaii JF 03 is reading 240 PCM counts.

Flight Roger.

Hawaii Gemini 7, Hawaii Cap Com. Would you give me a stack reading on 2 Charlie, please.

S/C Roger 2C is reading around $1\frac{1}{2}$ volts, oh, that's right.

Hawaii Say again.

S/C That is affirmative.

Flight LOS main Hawaii.

Hawaii Roger.

Houston here. Since we have played that tape Guaymas has acquired, they say they have TM solid and everything looks good on the ground. We expect that Elliot See will be talking to them any minute. They will probably wait until they clear the area for this S-5 experiment, weather terrain, pardon me, it is an optic terrain photography. Guaymas has been localized, the contact this pass comes straight down the back of Central America across the Isthmus of Panama and then down across Central America. The Rose Knot Victor parked 30 miles off the coast of Brazil will be talking to them in perhaps 10 minutes from now, 10 to 15 minutes. Some conversation on the line, it is mostly Guaymas Cap Com and our Flight Director here. Let's get a listen.

Flight ...a prayer for that 2C tonight.

Guaymas Roger, a good one.

AFD Texas Cap Com, AFD.

Texas Go ahead, AFD.

AFD Okay, are you set up on your command.

Texas Roger.

AFD Okay.

.... AFD, the MDCS will not be on to Texas.

Texas MDCS is on at Texas. We are commanding.

Still no conversation. In general it looks like the weather has started cooperating a little more today, certainly Hawaii was cloud free for the first time in several days. Earlier we were told the crew had a good look at the Texas area, White Sands they saw very clearly today.

Still no conversation. The White Team is in the Room. We are in that period of about 30 minutes when we have at least 2 people at each console going through the change of shift briefing. Taking a very close look at the TM in all the systems right now, particularly in that 2C, section 2 of

the fuel cell.

Texas You need not acknowledge this transmission. We have you go on the ground. We are standing by.

Houston again here. You heard the Texas Cap Com advise that we are standing by and they need not acknowledge, so we expect no further conversation. Let's take the line down at this time.

END OF TAPE

Houston here on the 107th revolution around the earth, Elliot See finally did raise 7 a little late that pass, and then there followed quite a lenthy discussion covering a number of subjects, among them the Laser experiment which as we advised earlier will be repeated on the 108th rev over Hawaii. Again our test procedure on that particular experiment called for the spacecraft to transmit a 100 pulse per second beam of light to the ground and once satisfied this was working all right the next step in the experiment is to transmit an 8 kilocycle beam from the spacecraft. Having done that then the third mode is to attempt voice communications. We want to make it very clear that no voice communications was attempted during the rendezvous at first encounter some 2 hours ago. We are advised from Hawaii however that they believe they did record some transmissions of that 100 pulse per second cycle and Elliot advises 7 of this in this transmission.

Cap Com Gemini 7, Houston.

S/C 7, go.

Cap Com Roger. I have a flight plan update for you. Are you ready to copy.

S/C Okay, you can give them to us.

Cap Com Node 172 01 19, rev 108, 81.0 degrees east, right Asension, 10 17 13. MSC-4 172 31 11, sequence 05, mode 02, pitch 30 degrees down, yaw 19 right. Use 16-mm camera, nominal settings, 01 frames per second. You have a good laser track. Use mode 03 also. Do you copy?

S/C Roger.

Cap Com How does that stack 2C look to you now, Jim?

S/C 2 amps now, Elliot.

Cap Com 2 amps, roger. In all this changing around we have done with the fuel cell, have you had the delta P light off at any time.

S/C Negative, it's been on all this time.

Cap Com Roger. 7, we have a report from Hawaii that they believe they received your Laser beam. They will know better when they develop some film. They have to actually develop that film to check their data, but they do have a scope and they believe they received some pulses.

S/C Good, very good. Are we scheduling it again.

Cap Com We are scheduling it again for 108 and we will give it another try then. They are checking the fuel situation. It is possible we may have to terminate the experiments a little early today in order to save enough fuel to cope with this venting. We are definitely keeping an eye on that.

S/C Let's try that Laser though, even if we have to cut something else out, Elliot.

Cap Com Roger, we will do that on a high priority then.
We believe at the present time that we will have enough fuel for all the presently scheduled activities today, but we will keep up on that.

S/C Thank you. We are not even going to touch the hand controller unless you schedule it, Elliot.

Cap Com Roger.

S/C Except when it starts to tumble pretty swiftly.

Cap Com I get the impression that it goes at it at discrete times, that is, it is not such a continuing thing as it is an occassional pulse, maybe 4 or 5 times a rev, does that sound right to you.

S/C Roger, it is not really a pulse but the thing starts venting and then it just slowly builds up. I just reported one to

Hawaii.

Cap Com — Does that happen about 4 times a rev.

S/C — No, I don't believe it is quite that frequent.

Cap Com — Roger.

Flight — Frank.

S/C — .....

Cap Com — Say again.

S/C — You can tell it very easily because the cockpit cools off.

Cap Com — The cockpit cools off -- as soon as this venting happens.

S/C — When the water boiler boils, it seems like the cockpit cools down.

Cap Com — We believe that it is simply venting and not actually boiling.

S/C — I don't know, but we are getting a change in temperature with it.

Cap Com — Roger. We will take that into consideration here and see if we can add it to analysis.

S/C — Thank you.

Cap Com — How do you feel about how much tumble you can stand while you are sleeping?

S/C — I don't think it bothers us. We didn't even know it until we wake up.

Flight — That is what concerns me, you see if you can stand the tumbling then we don't have to worry too much about getting rid of some of that water.

Cap Com — Do you feel that the tumbling actually waked you up last night, Frank. You said you noticed it after you waked up and we were wondering if the tumbling caused you to wake up.

S/C I don't think the tumbling did, the coolness more than the tumbling. But we did have a sort of a sensation, at least I did, like we were standing on our head part of the night and this might be attributed with the tumbling.

Cap Com Roger.

Surgeon Jim, could you comment upon the ease or lack of sleeping in the suit as compared as to your having been out of it before.

S/C The suit makes you more immobile for sleeping. You are sort of rigid in the cockpit space. There are hot spots in the suit where your legs are bent back and forth and in the crotch area which are local hot spots and of course damp No suits, of course, you are sort of vented all over.

Surgeon Roger. Are you operating with all the zippers open the same way Frank was.

S/C No, I have the zipper open in the crotch area, that's all.

Surgeon Roger.

S/C Also with the suit on the helmet, of course, is right at the back of the neck.

Surgeon Roger.

END OF TAPE

**(Includes Tananarive and Carnarvon passes not aired during T-1 GT-6 Briefing)

HOUSTON Gemini 7, how do you read?

S/C Go ahead.

HOUSTON Roger, 7. Could you give us a read out on the stack amperages again, please?

S/C 1A is 3.5; 1B is 4, 1C is 4, 2A is 3, 2B is 2.5, 2C is 1.5 to 2. 2C is slightly under 2.

HOUSTON Slightly under 2, roger. And, 2A was 3.0. Is that correct?

S/C That's correct.

HOUSTON And, 2B was 3.5. Is that correct?

S/C Negative. I said 2.5.

HOUSTON Roger. 2.5. Seven, we'd like for you to do a normal fuel cell purge at this time.

S/C .....normal fuel cell purge. Gemini 7, our water boiler is venting again.

HOUSTON Roger, 7. Water boiler is venting again. Gemini 7, our point here is to observe the results of this purge and if it does not help the situation, you'll probably be doing the high flow purge again as we started to do yesterday.

S/C Roger. Please...the flight plan to allow us fuel for attitude control. However, due to this experiment...venting.

HOUSTON Understand you want us to allow some fuel for the venting control. Is that what you're saying, Frank? Gemini 7, Houston. We understood you to say that we should take into account the water boiler venting in regard to the scheduling of the experiments from a fuel standpoint. Is that correct?

S/C Roger. ....(Garble)...it's venting great.

**(Includes Tananarive and Carnarvon passes not aired during T-1 GT-6 Briefing)

HOUSTON Roger. Gemini 7. Would you verify that the adapter C-Band beacon is on.

S/C Roge. It is.

HOUSTON And place your TM switch to command.

S/C TM switch is on command.

HOUSTON Roger.

S/C Purge complete.

HOUSTON Roger. Understand purge complete. What does the stack 2C amperages read now, Jim?

S/C 1.5 amps.

HOUSTON Roger. Gemini 7. I think we're about to loose contact. Do you notice any change in stack 2C at this point?

ASCENSION This is the Cap Com, Ascension. We didn't read you. Would you say again, please?

HOUSTON I was talking to the spacecraft. I guess they're out of contact now.

TAN Tananarive has acquisition.

HOUSTON Gemini 7, Gemini 7, Houston. How do you read?

S/C I can hear you. Go ahead.

HOUSTON Roger. Can you tell us anything new on stack 2C?

S/C 2C registering the same; about 1.5 amps.

HOUSTON Roger, 7. We'll be standing by.

TAN Tananarive has LOS.

CRO Gemini 7, Carnarvon Cap Com. Would you turn your TM switch to "Real Time Acq Aid" position.

S/C Roger. TM at "Real Time Acq Aid" and the fuel cell 2C stack is on the low side of 1.5, it appears to be.

** (Includes Tananarive and Carnarvon passes not aired during T-1 GT-6 Briefing)

CRO Roger. Thank you.

HOUSTON What do you read?

CRO Stand by. We just got TM. We'll have to do a little calculating here. Gemini 7. Would you turn your C-Band beacon to a continuous position, please?

S/C C-Band is on continuous.

CRO Roger.

HOUSTON Carnarvon Systems, Houston Flight.

CRO Go ahead, Flight.

HOUSTON We've got an update for them on MSC-4. Please copy. 167:43:24, Sequence 05. Mode 01. Pitch 30 degrees down. Yaw 20 degrees right. This is over Hawaii on the next pass. On this coming up pass.

CRO Check, copy. Gemini 7, Carnarvon Cap Com.

S/C This is 7. Go ahead.

CRO We have an update on MSC 4 experiment for you, when you're ready to copy.

S/C Roger. Stand by.

CRO Flight, 2C is reading 1.84 on the ground.

S/C Go ahead, Carnarvon.

CRO Alright, Roger. MSC 4. Time 167:43:24. Sequence 05. Mode 01. Pitch 30 degrees down. Yaw 20 degrees right. That'll be over Hawaii this pass.

S/C We copy.

CRO Roger.

HOUSTON Also like to have them transmit from their beacon regardless of whether they see it from the ground or not.

**(Includes Tananarive and Carnarvon passes not aired during T-1 GT-6 Briefing)

CRO Would like to have you transmit on your beacon regardless of whether you see it on the ground or not.

S/C Will do.

CRO We'd also like to know whether you are using the special Laser telescope on your last pass over the States?

S/C That's affirmative. I was using both. I was using the telescope and also just eyeballing it.

CRO Okay. And, did you do any transmitting?

S/C Roger. I did a few seconds transmitting at our closest point on approach.

CRO Roger. Would like to have you leave the adapter C-Band beacon on for tracking over the RTK and up to Hawaii.

S/C Roger.

CRO Apparently he still has that DCS circuit breaker up when we had him turn TM and C-Band on manually.

HOUSTON Yea. Let's leave it that way. As long as we're up with the Pad here.

CRO Roger. That's what we figured on doing.

HOUSTON Tell him that it looks like that amperage is up slightly, on the ground computation.

CRO Gemini 7, Carnarvon. The ground computations show that your amperage is up slightly.

S/C That's right. It went up over Carnarvon.

CRO Roger.

S/C You guys do good work.

CRO I don't see how we could help on that.

**(Includes Tananarive and Carnarvon passes not aired during T-1 GT-6 Briefing)

HOUSTON Tell them that there is a possibility that White Sands was not boresighted on that last pass.

CRO There's a possibility that White Sands was not boresighted on that last pass.

S/C That's our conclusion.. Boy, we had it dead to rights.

CRO Roger. Our calculations show that its up to 246 right now.

HOUSTON Roger. 246.

CRO 2.46. Gemini 7, Carnarvon.

S/C Go ahead, Carnarvon.

CRO Roger. Our ground calculations at the present time are showing 2.46 amps.

S/C Let me scratch it down here and see what I can read. I'm reading close to 3 amps now.

CRO Roger. Very good.

HOUSTON Tell him to scratch down more and get it up to 5, will you.

CRO Flight says scratch down just a little more and get it up to 5, would you.

S/C I'm doing my best.

CRO Roger. I'm up to 283 on the ground now. Apparently that purge did the right thing, Jim.

HOUSTON Something's doing the right thing. I think just talking about it helps it go up.

CRO I'm sure it did. Gemini 7, Carnarvon. We're on LOS shortly. Would you turn your TM back to the command position.

S/C Roger.

**(Includes Tananarive and Carnarvon passes not aired during T-1 GT-6 Briefing)

CRO You ought to see the big smiles on these systems engineers' faces. That's the most excitement they've had in a long time.

HOUSTON Roger. Ask if they'd like to join our experts here.

CRO We might get a negative on them. Our LOS showed the calculation down to 2.46.

HOUSTON Say again.

CRO Our calculations at LOS showed it down to 2.46.

HOUSTON How about holding your pumper there; and we'll give you the word to send us an auto summary as soon as we get our computers back up in about 15 minutes.

CRO Roger. Will do.

HOUSTON Thank you.

END OF TAPE

This is Gemini Control. Gemini 7 is sweeping down toward the west coast of South America ready to begin its 108 revolution. On its 108 revolution, over Hawaii, it will attempt once more to perform the MSC 4 Laser communication experiment. This experiment will be performed with an 8000ths pulse signal and possibly voice communications between the Gemini 7 crew and the Hawaiian tracking station. The situation in Hawaii is daylight. This is not necessarily what we had hoped to get. We had hoped to get a bank pass over Hawaii, but we will attempt once more to get a fix on the ground beacon, the Laser ground beacon, at Hawaii, and for the spacecraft crew to find that beam and acquire it with their onboard transmitter. This is Gemini Control at 171 hours and 11 minutes into the flight of Gemini 7.

HAW Seven, Hawaii Cap Com.

S/C Go ahead, Hawaii. This is Gemini 7.

HAW Roger. We show you go on the ground. I'll get back to you in a second.

S/C Roger.

HAW A couple of questions to ask you here. First of all, how much time do you have left on your D-4, D-7 tape recorder?

S/C Just a moment; I'll look it up. About 8 minutes and 10 seconds left.

HAW Roger. Copy. 8 minutes, 10 seconds. Okay. I'd also like to have your evaluation of the weather over Hawaii. If you're in a position that you don't have to use maneuvering.

S/C Roger. Could you give us CPA reading?

CRO CPA, right.

HOUSTON That's closest point of approach.

S/C We're just tumbling now, and if we have a good idea just exactly what time we go over the islands, we could see if we're looking we could check it.

HAW Roger. We'll give it to you. It's a TCA on my mark. Mark.

S/C Roger. ...(Garble)...before we can give you a good evaluation.

HAW Roger.

S/C Has it cleared any since the last time we made the Laser?

HAW Say again.

S/C We wonder if it's cleared any since the last time we tried the Laser?

HAW Roger. It has, quite a bit.

S/C I see the islands now. I'd sure like to try it again, if it's not bad. I'd like to give it a whirl anyway.

HAW Roger. We'll keep Houston advised of the weather situation here.

S/C Cloudy, cast, or broken?

HAW Broken.

S/C Okay.

HOUSTON Hawaii Cap Com, AFD. Hey, Cap Com, AFD.

HAW AFD, Hawaii Cap Com.

HOUSTON Roger. I would like you to advise the crew that the fuel cell purge over RKV at time 171:26 minutes is deleted and it's been changed to RKV the next rev at time 173 plus 01.

HAW What was that first time? 171:26.

HOUSTON Roger.

HAW Gemini 7. We have a slight flight plan change here for you. Are you ready to copy?

S/C Ready.

HAW The fuel cell purge due over the RKV at 171 plus 26 has been deleted. Have a fuel cell purge over the RKV at 173 plus 10.

HOUSTON Zero 1.

S/C Understand the fuel cell purge for 171 plus 26 has been deleted. We're now going to purge at 173 plus 10. Is that right?

HAW	Negative. That's 173 plus 01.
S/C	The new purge time is 173 plus 01?
HAW	Roger. Still have ... of that tape recorder on?
S/C	Affirmative.
HAW	Roger. You can turn Number 1 off.
S/C	Roger. One is off.
HOUSTON	How did the dump go, Hawaii?
HAW	We haven't completed the dump.
HOUSTON	Roger.
S/C	Say, will you ask Houston how long we should leave 2C on. When we should shut it down if the figures get below one figure?
HAW	Roger. Will do. Houston Flight, did you copy?
HOUSTON	Roger. We heard that. We'll advise them over the RKV.
HAW	Roger. We...You will be advised of that over the RKV.
S/C	Thank you.

END OF TAPE

This is Gemini Control at 171 hours and 20 minutes into the flight of Gemini 7. The 7 crew has just begun its 108 revolution around the Earth and is headed across South America on a southeasterly sweep. We've just had a status check; Mission Control and the World Network reported everything is go. The spacecraft is go. There has been very little voice communication between the ground and the crew; but they are preparing, as we know, at another attempt at a Laser communication experiment over Hawaii in about one hour from now. Meanwhile, we'll be standing by at Mission Control. This is Gemini Control at 171 hours and 20 minutes into the flight of Gemini 7.

END OF TAPE

This is Gemini Control. Gemini 7 is crossing the South Atlantic after having crossed the Rose Knot Victor Tracking Ship off the east coast of South America, and it is now in its 171st hour and 38 minutes of flight. We have a tape of the conversation between the Rose Knot Tracking Ship and the Gemini 7 crew and we'll play that tape for you now.

RKV AFD, RKV. . .

S/C Go ahead.

RKV Section 2 Charlie - 1.decimal 32.

S/C Roger.

RKV Gemini 7, RKV.

S/C This is 7, go ahead.

RKV Roger. I've got a blackout period for you if you're ready.

S/C Roger. Stand by.

Ready to copy.

RKV Roger. (garbled)..... for all areas is 21 plus 40. Area 111-3: 176 34 57. Area 112-Bravo: 178 09 57. Area 113-Delta: 179 08 38. Area 114-2: 180 44 24. Area 115-2: 182 17 29. Area 116-2: 183 50 35. Area 117-1: 185 23 05. The weather is good in all areas.

S/C Roger. Flight, was that area 111-Delta?

RKV Negative. It was Area 111-3.

S/C Roger. And what was the Delta area .....?

RKV That was Area 113-Delta.

S/C I understand. 113-Delta. Thank you.

FLIGHT RKV Cap Com, AFD.

RKV Go ahead, AFD.

FLIGHT Roger. In Area 117-1, the time should be 185 23 07. I believe you passed up the 05.

RKV Gemini 7, RKV.

S/C Go ahead, RKV.

RKV Would you read me your Delta Area 117-1?

S/C Roger. 117-1 - 185 330. You gave me - you gave me 7 digits there.

RKV Roger. I'll do it again. 185:23:07.

S/C Roger. 185 23 07.

RKV Flight, this RKV.

FLIGHT Go ahead, RKV.

RKV .....This got a lot of printouts on the stack currents. 2C is still reading 1.33.

FLIGHT Roger.

RKV RKV has LOS.

You have been listening to a taped playback of the communication between the Rose Knot Tracking Ship off the east coast of South America and the Gemini 7 crew now approaching the west coast of the southern tip of Africa. The crew should now be entering a housekeeping period, where they'll be straightening up some of their stowage in preparation for a laser experiment over the Hawaiian Islands in about 45 minutes. This is Gemini Control.

This is Gemini Control. At 172 hours and 06 minutes into the flight of Gemini 7. The 7 is now approaching on its 108th revolution, southeast Asia. It has just recently passed the Tananarive Tracking Station off the east coast of Africa, where unfortunately, the crew was informed that the MSC-4, the Laser Experiment, would not be attempted on this revolution. The reasons given were that there are broken overcast clouds over there, a bad sun angle, and they would rather attempt the experiment later at night. Let's get into a tape of that pass over the Tananarive Tracking Station now.

CAP COM Gemini 7, Gemini 7, this is Houston Cap Com, over.

S/C Go ahead, Houston.

CAP COM Roger, Gemini 7. I got an update on your flight plan if you're ready to copy.

S/C Be ready in a minute.

CAP COM Okay, Gemini 7. We're being forced to scrub the MSC-4 at Hawaii. We've looked at it pretty closely from all directions. This is the MSC-4 at 172:31:11. The weather is broken overcast, you've got a bad sun angle, and the experimenters would rather wait for a Hawaii night, or very early morning pass, rather than go ahead and try it now. It doesn't look too good at all.

S/C All right. Thank you.

CAP COM Okay. And I've got a D-4/D-7 update.

S/C Right.

CAP COM Okay. D-4/D-7 at 172:38:57. Sequence 427. Mode 02. Pitch - 12 degrees down, Yaw - Niner 5 degrees left. ..... low, right to left for a total of 5 minutes. Is 30 seconds recorder maximum and use cameras.

S/C Gene, we have it.

CAP COM Roger. Understand you've got it. We'd like a prop quantity readout, please.

S/C Our propellant quantity reads 93- - - 94 percent.

CAP COM Roger, understand. 74 percent.

S/C ..... correction, I'm sorry - 24 percent.

CAP COM Roger. 24 percent. We got it.

S/C 24 percent.

CAP COM Understand. 24 percent.

S/C Right.

CAP COM Okay. And I'd like to advise your pass over the CSQ will be UHF 6.

S/C Thank you.

CAP COM Okay. And Frank, we're taking a good look at your fuel cell at this time and we'll advise you as soon as we come up with some reasonable conclusions on it.

S/C Thank you.

CAP COM Gemini 7, Gemini 7, Houston CAP COM.

S/C Go ahead, 7.

CAP COM Roger, Frank. We'd like you to turn your Section 2 power switch OFF at this time. We'd like to monitor it for about a rev. We'll probably bring it back on at the RKV this next pass and w'll advise you further at that time. Over.

S/C Section 2 power?

CAP COM That's affirmative. Your Section 2 power switch to the OFF position.

S/C 2 off.

CAP COM Okay.

S/C 7 LOS.

This is Gemini Control. Gemini 7 is now approaching the Coastal Sentry Tracking Ship in the Pacific Ocean. I believe the crew has been talking, or has been acquired, by the tracking station. Let's tune in live on that conversation now.

FLIGHT CSQ Cap Com, Houston Flight.

CSQ Go ahead, Flight.

FLIGHT Roger. We'd like some open-circuitvoltages on the entire Section 2. 2 Alpha, 2 Bravo, and 2 Charlie.

CSQ That's roger, CSQ.

Gemini 7, CSQ.

S/C Gemini 7 CSQ. Go ahead.

CSQ Roger, Gemini 7. Can you verify that the crossover switch is in the ON position?

S/C I can verify that the crossover switch is in the OFF position.

CSQ We want it in the ON position.

S/C Roger. (garbled) is in the ..... position.

CSQ Roger.

Gemini 7. We would like open-circuit voltages on 2 Alpha, 2 Bravo, and 2 Charlie.

S/C Roger, CSQ coming up.

2 Alpha is off-scale high above 32 volts. 2 Bravo is off-scale high above 32 volts, and so is 2 Charlie off-scale above 32 volts.

CSQ Roger, Gemini 7.

Gemini 7, we're standing by for your flight plan report.

S/C Roger, Gemini 7. As to the film situation - we've used 2 magazines plus 40 exposures of S0217. Of the ASA64. (garbled) plus 3 feet of 16-mm film. Five exposures of dim-light black and white. 70 exposures of color-shifted IR. We have not used

any of the ASA 500 S0217. The Command Pilot's total in column 5 is 18. Column 6 is 4. The Pilot - column 5 is 17 and column 6 is 2. Pilot this morning on the S-8/D-13 vision test missed three. The Command Pilot missed seven.

CSQ Roger, copied.

S/C That's right in. We've accomplished everything else in the flight plan except the things that Flight has been informed of already.

CSQ Roger, Gemini 7.

Gemini 7. We'll have a complete briefing over the RKV on the next pass on your fuel-cell status.

S/C Roger. Thank you.

CAP COM CSQ, Cap Com, AFD.

CSQ Go ahead, D.

CAP COM Roger. We need another main summary.

CSQ Roger.

Flight, CSQ

FLIGHT Flight, CSQ.

CSQ Roger. The crossover switch was in the OFF position at acquisition. We had them put it ON.

FLIGHT Roger, thank you.

CSQ Flight, CSQ.

FLIGHT Go ahead, CSQ.

CSQ We have a 1 Alpha count of 6 decimal 06. 1 Bravo 6 decimal 86. 1 Charlie computed 5 decimal 3.

FLIGHT Roger. We have your summaries.

CSQ Flight, CSQ. He has just powered up and .....

FLIGHT Roger.

FLIGHT Roger, CSQ. Let's have another LOS Main and an A summary, please.

CSQ Roger, will do.

We're getting nose full thrust right ..... Flight.

FLIGHT Roger.

FLIGHT CSQ Cap Com. Houston Flight.

CSQ Go ahead, Flight.

FLIGHT Do you have indications on Baker Baker 04?

CSQ That's affirmative.

FLIGHT Okay.

This is Gemini Control. You have been listening to a live transmission between the Gemini 7 crew and the Coastal Sentry Tracking Ship. Gemini 7 is now on its way toward Hawaii on its 108th revolution, 172 hours and 18 minutes into its flight. Right now the crew aboard Gemini 7 is preparing to eat, and in the middle of its eat period - eating period - somewhere over Hawaii, or just after Hawaii, they will begin a D-4/D-7 Experiment. That experiment is taking radiometric measurements of objects in space, maybe - usually the stars, or the moon. However, they are in the middle of a day, an orbital day, the sun is shining very brightly over there right now and after that experiment and they have finished their meal, the crew aboard Gemini 7 will get ready to go into a sleep period, which begins somewhere in the very beginning of its 109th revolution later. At 172 hours and 19 minutes and 14 seconds into the flight of Gemini 7, this is Gemini Control.

END OF TA PE

This is Gemini Control, at 172 hours and 44 minutes into the flight of Gemini 7. Gemini 7 is now on its 108th revolution getting ready to begin its 109th, having just crossed the Hawaiian Islands a few minutes ago. Originally we had planned to conduct a MSC-4 Laser experiment over the Hawaiian Islands, but the experiment was scrubbed because a broken overcast - this means there was more than 50 percent cloud cover and the results would have been hard to predict. Also there was a bad sun angle there and they decided they would rather attempt this at night when the crew thinks it might be able to spot the Laser beacon on the ground more readily. We have a taped conservation between the Gemini 7 spacecraft and the Hawaiian tracking station and we will play that tape for you now.

HAW Gemini 7, Hawaii Cap Com.

S/C . . garbled . .

HAW Okay. We show you go here on the ground. How are you doing?

S/C We are still . . garbled . .

HAW Okay. We would like a little evaluation of what that Laser looked like to you as far as light intensity.

S/C Wasn't too bright. And the thing that impressed me, I thought that up here the ah - it would be bigger than just a small flash like that. It looked rather small.

HAW We've got a very narrow beam width .008.

S/C I'd run into couple hundred miles out side of . . garbled . . wider than that.

HAW I think they are going to widen it up a little bit for you.

S/C Yea. If we get good weather there is absolutely no problem acquiring. I had that colder than a mackerel.

HAW Very good.

S/C Looks like a nice little bed you all have up there on that mountain top.

HAW Say again.

S/C Looks like a nice little camp you all have up there on that mountain top.

Flight Can they compare to a star of known intensity?

HAW Say again Flight.

Flight Have them compare it to a star of known intensity. One of the ones he uses.

HAW Okay. Compare as far as the intensity goes to some star that you are aware of.

S/C Off hand I would say it was on the order of Rigel, maybe.

HAW Okay, thank you.

S/C Hawaii, this is 7.

HAW Go ahead.

S/C We've got the island again. Looks like sort of broken overcase, is that correct?

HAW Yea. Last time outside it looked like, oh about 5000 broken, 6 tenths covered - about 7 tenths covered.

S/C The . . garbled . . part of the island looks pretty good. But your end has some cloud coverage over it.

HAW That figures. Got to run my hotel.

S/C Looks pretty good. Looks like most of the island is uncovered.

HAW I think I'm going to spend the night up here tonight.

S/C Hey, you ought to go to Honolulu. Looks pretty clear down there too.

HAW You mean Hondolurie.

S/C Yea. All looks pretty cloudy though.

HAW Alright Hawaii, Flight, I've got some pressures here if you would like them.

Flight Okay, go ahead.

HAW Okay. ECS O_2 pressure is 865 psi. Fuel cell O_2 pressure 915 psi.

Flight Stand by. Cell O_2?

HAW Fuel cell O_2 pressure 915 psi.

Flight Okay.

HAW Fuel cell H_2 pressure 231 psi. Okay, stand by on that fuel cell O_2. That doesn't look right. Let me take a look at it flight. 915 psi.

Flight Roger.

HAW Supper.

S/C Pilot had a little tuna salad, a little orange drink. And he forgot what he ate for dinner last night too. Give my regards to the chef, will you? Wish we had one.

HAW Up, Flight.

Flight Okay Hawaii

HAW LOS

Flight Roger, Hawaii

This is Gemini Control. We are just a few minutes now from the beginning of the 109th revolution at 172 hours and 48 minutes into the flight of Gemini 7. This is Gemini Control.

END OF TAPE

This is Gemini Control. Gemini 7 has just passed the Rose Knot tracking ship off the east coast of Africa and has begun its 109th revolution. It is now 173 hours 11 minutes into its flight which began last Saturday. All systems are reported go and Dr. Fred Kelley, our flight surgeon reports the pilots are go. This activity you will hear on the taped conservation between the crew of Gemini 7 and the Rose Knot mostly concerns itself with the purging of the fuel cells. That tape transcription now.

RKV Gemini 7, RKV Cap Com.

S/C RKV go ahead.

RKV Roger. We'd like to know whether you've been monitoring your open circuit voltage on section 2?

S/C We sure have. Section 2 failed to go on scale high by 12:30 today.

RKV Aren't you on scale height?

S/C Roger. We're on scale height.

RKV Have you noticed any deviations or fluctuations at all?

S/C It's a little low. . . garbled . .

RKV Roger.

S/C We still have a Delta P though, RKV

RKV Roger. Would you like to go . . garbled . .

Flight Affirmative.

RKV Would you bring the section 2 power switch to high and also leave the cross over switch on.

S/C Roger. Leave the cross over on; 2 power switch to high.

RKV Roger

S/C Looks like I carry about . . garbled . .

RKV Roger.

Flight How do they look on the ground?

S/C . . garbled . . 5 amps.

Flight How do they look RKV? How does he look on the ground?

RKV They look all right Flight. I think we ought to go ahead with the purge.

Flight Okay, go ahead.

RKV We are standing by. We'd like you to purge both sections.

S/C Roger. Purge both sections.

Flight Give us your main summary, RKV.

RKV Coming at you, Flight. Place your quantity read switch to ECS O_2 - fuel cell O_2 - fuel cell H_2. Place your quantity read switch to off. Purge is on the right track.

Flight Roger.

RKV Figures show C about 1.95.

Flight Roger. Let's have your summary. Summary.

RKV Okay.

Flight I know they are . . at LOS, Bill

RKV Roger. Purge count, it looks like 2.10 here now.

Flight Roger

RKV According to our figures on the A or B.

Flight Roger. We got the same conditions here.

S/C . . garbled . . powered up again tonight?

RKV Roger, we'd like you to leave the power switch on for CSQ. We'll give you some more data when you get to CSQ.

S/C . . garbled . .

Flight Bill, if you've got time, and it looks like it, you can give him OAMS summary you've got out there.

RKV Okay. We got your information here on the OAMS status.

S/C Go ahead.

RKV Okay. Your quantity pressure shows you have 47 pounds of OAMS fuel remaining. And this is actual 26.5 percent. Your onboard rates should read . . garbled . . this time. This puts you about 3 pounds above the minimum and we want to keep you here until lift-off.

S/C . . garbled.

RKV Incidentally, we have budgeted a total of 9 pounds of fuel for contingency, such as venting which is included . . . garbled.

S/C Thank you.

RKV Flight, RKV

Flight All right, RKV.

RKV . . garbled . . doing better. We've got 221 . .

Flight Yea. We're watching it here.

S/C RKV, tell Houston, we have no . . garbled.

RKV Roger, will do.

Flight We got it.

S/C RKV

RKV Yea, we copied that. RKV, LOS.

Flight Roger, RKV, good pass Bill.

At 173 hours and 16 minutes into our flight and into the middle of our orbital flight, Gemini 7 is crossing the South Atlantic toward the southern tip of Africa. This is Gemini Control

END OF TAPE

This is Gemini Control. Gemini 7 is about to cross Africa for the 109th time. And its 173rd hour and 20 minutes of flight since lift-off a week ago; halfway through its 14-day mission. The Gemini 7 crew, and the world tracking network, and the Mission Control Center are all in a green and "go" condition, halfway through this long duration flight and preparing for Gemini 7 and Gemini 6 to rendezvous tomorrow. In a few minutes the crew will begin a long sleep period; not necessarily sleeping, but resting. After breaking into the daylight over the Pacific Ocean the sleep period will begin. This is Gemini Control.

END OF TAPE

This is Gemini Control, 173 hours and 56 minutes into the flight of Gemini 7. The spacecraft has just passed over the Coastal Sentry tracking station, and even though its sleep period had begun, the Coastal Sentry tracking ship did pass up some information to the spacecraft and we have the information on tape. We will play that tape for you now.

CSQ Gemini 7, CSQ Cap Com.

S/C Gemini 7, Go ahead CSQ.

CSQ Flight CSQ.

Flight Go ahead CSQ.

CSQ Roger. Main bus current on at 11.5 and main bus current 2 - at 6.11 amps.

Flight Roger. We want to go open circuit.

CSQ Roger. We are going power switch off on sectior 2.

Flight That's affirmative. And we will stay that way through the sleep period.

CSQ Roger, understand.

S/C Pulse . . garbled . .

CSQ Roger I got it. We want you to put your section 2 switch to OFF and you will remain that way through the sleep period.

S/C . . garbled ..

CSQ Say again, I did not copy.

S/C Say you want section 2 OFF with the power switch ON

CSQ That's affirmative.

S/C Say you want the cross-over valves left ON.

CSQ That's affirm.

S/C Okay

Flight Negative. The cross-over valves should be left closed.

CSQ I understand, closed, Flight.

Flight Roger. It's at the bottom of your TWX.

CSQ Flight, you want the valve closed, which way do you want the switch?

Flight Stand by. Switch should be off.

CSQ Roger, copy OFF. Gemini 7, CSQ. We would like that switch to be in the OFF position. Cross over switch to the OFF position.

S/C Roger, cross over switch to OFF position.

CSQ Roger. . . . garbled . . in continuous.

S/C Roger . . garbled . .

CSQ . . garbled . . for the sleep period is as follows: ECS O_2 OFF, fuel cell O_2 in AUTO, fuel cell H_2, prior to going to sleep want you to bring that one to a nice one of 510.

S/C How about 390?

CSQ We'll monitor that from the ground

CSQ . . . garbled . .

Flight Negative. That's uncessary.

CSQ It's not necessary. Could you give me your sleep configuration as far as headset gear, et cetera.

S/C Command pilot has orbital flight suit on and the pilot will have the regular flight suit on . . garbled . .

CSQ Neither will have on gloves and negative headgear.

S/C No gloves no headgear.

CSQ Roger, copy. Flight CSQ, section 2 powered down.

Flight Roger, give us . . garbled main.

CSQ Roger.

Flight You want to get the water intake on the pilot and copilot . . garbled . .

CSQ Roger . . garbled . . the pilot is 498 ounces and the command pilot 585. . . garbled . .

Flight Okay.

CSQ . . . garbled . .

Flight Yea, you might as well.

CSQ Roger. Gemini 7, the section 2 power switch was turned OFF . . garbled . . to produce water.

S/C Roger

Flight That's all you need.

CSQ . . garbled, flight

Flight Roger Delta P lights or anything out there on the ground? BBO4 is it still with us?

CSQ . . garbled . .

Flight Say again.

CSQ We didn't have an ACK pickup.

Flight Okay, why don't you have them check the ACK beacon circuit breaker?

CSQ Gemini 7, CSQ. Would you check your ACK beacon circuit breaker?

S/C Closed.

CSQ We got it now Flight.

Flight Roger

This is Gemini Control. The sleep period for Gemini 7 has begun and the crew is scheduled to end the sleep period at 6:35 a.m. Central Standard Time. At 174 hours and 1 minute into this flight, this is Gemini Control.

END OF TAPE

This is Gemini Control. We are 174 hours and 20 minutes into the flight of Gemini 7 which is fast approaching the west coast of South America and the beginning of its 110th revolution. The crew is in its rest period and Gene Kranz, and the Flight Directors here at Mission Control are about to begin their eat period. This is Gemini Control.

END OF TAPE

This is Gemini Control at 175 hours and 20 minutes into the flight of Gemini 7. The crew is in a sleep period scheduled to last until 6:35 a.m. Sunday, Central Standard Time. At this very moment Gemini 7 is passing over China on it's 110th revolution and appropriately enough, here in Mission Control Center, we are eating a Chinese dinner. Which opened up with Ramoki, egg rolls, barbecued ribs won-ton, almond gidin, sweet and sour pork, mandarin duck, fried rice, and steak cubed. This was provided by a Houston restaurant and the Mission Control Center personnel have gorged themselves, and are ready to go into a briefing on tomorrow's rendezvous exercise. At 175 hours and 21 minutes into the flight of Gemini 7, this is Gemini Control.

END OF TAPE

This is Gemini Control, at 176 hours and 20 minutes into the flight of Gemini 7, which is now on a northeasterly pass across the South Atlantic, having just left the east coast of South America. The Gemini 7 crew is in a sleep period in the middle of another orbital night. There has been no communication with them since their sleep period began an hour or so ago. Meanwhile at Cape Kennedy we have a report on the preparation for the Gemini 6 launch scheduled for 9:54 a.m. Eastern Standard Time, Sunday. And here is that report! They have fueled the Gemini launch vehicle. The fueling began at 6:00 p.m. Eastern Standard Time and was completed at 9:15 p.m. Eastern Standard Time. Men are cleaning up Complex 19 in preparation to pickup countdown at 3:29 a.m. for the spacecraft and 5:29 a.m. for the launch vehicle. The crew for Gemini 6, astronauts Schirra and Stafford, went to sleep at about 9:00 p.m. Eastern Standard Time. The forecast around the Cape for launch time tomorrow is a 5,000 foot broken ceiling; winds from 8 to 10 knots from the south southeast; mild temperatures between 68 and 70 degrees Fahrenheit; and two to three feet waves off shore. The word from the Cape is "we are GO." We are also GO in Mission Control and they are GO aboard Gemini 7 as they make their silent sweeps around the world on their 111th revolution at 176 hours and 21 minutes into the flight. This is Gemini Control.

END OF TAPE

This is Gemini Control. Gemini 7 is 177 hours and 20 minutes into its flight, or as Flight Director Gene Kranz prefers to say, has 152 hours and 37 minutes to go. The spacecraft at this time is over the Canton Islands, the Canton Island tracking station, but it is making a silent pass with the crew in its sleep period. It is in its 111th revolution passing over the Pacific Ocean. At this time - at this same elapsed time in August - August 28, astronauts Cooper and Conrad were in their 112th revolution over the same general area. Their revolutions - their being 1 revolution ahead because of the wider inclination of their orbit and the lower altitude of their orbit. Sometime tomorrow, during the noon hour, Gemini 7 will eclipse the record of 190 hours and 56 minutes of space flight set by astronauts Cooper and Conrad last August. Right this minute, the Blue Team, with Flight Director John Hodge, is moving into the Mission Control Center to relieve the White Team, which will be shortly leaving for its press conference. So at 177 hours and 21 minutes into the flight of Gemini 7, this is Gemini Control.

END OF TAPE

This is Gemini Control, 179 hours and 20 minutes into the flight of Gemini 7. We are just now beginning the one-hundred and thirteenth revolution of Gemini 7. Our next station to acquire the 7 will be the Rose Knot off the east coast of South America. The crew of Gemini 7 is asleep and have been for some time. Pilot James Lovell went to sleep about five hours ago, and Command Pilot Frank Borman about three and a half hours ago. When Gemini 7 is over the ship -- tracking ship Rose Knot in a few minutes, a tape dump of onboard telemetry is scheduled. The Control Center here began to reconfigure about an hour ago to support Gemini 6 for the Sunday morning launch. Gemini 7 is now shown on our world map here in the Control Center as an Agena vehicle, which it will continue to be shown as throughout the rest of the mission involving Gemini 6. The Control Center will begin supporting the Gemini 6 countdown at the Cape at 2:29 a.m. CST. With the Gemini 7 spacecraft now starting its pass across South America at 179 hours and 21 minutes into its mission, our clocks show 457 minutes and 0 seconds until the liftoff of Gemini 6. This is Gemini Control.

END OF TAPE

This is Gemini Control, 180 hours and 20 minutes into the flight of Gemini 7. We are now in the one-hundred and thirteenth rev of 7, and the Gemini 7 is over New Guinea on its pass down across the South Pacific. A few minutes earlier, the Rose Knot tracking ship reported all systems "go" and that the crew was asleep. This was the Rose Knot's last contact for the night, and Flight Director John Hodge released the flight controllers for the night. The Canary tracking station pass a few minutes later also reported the crew asleep based on biomedical data. In about 40 minutes, the Control Center here in Houston will begin supporting Gemini 6 on Launch Pad 19 at Cape Kennedy. The count on 6 is now standing at 397 minutes and 49 seconds and counting. With Gemini 7 now making its pass down across the Pacific, we are 180 hours and 21 minutes into the mission. This is Gemini Control.

END OF TAPE

This is Gemini Control, 181 hours and 20 minutes into the flight of Gemini 7. Gemini 7 is now in its 114th rev over North Africa. The last stations to acquire Gemini 7 were Antigua and the Canary Islands tracking stations. The crew, Frank Borman and James Lovell, are still in a sleep period. Gemini 7 now over North Africa, will pass over India as it makes its swing across the southern part of Asia. On our last check on Gemini 7, it had an apogee of 162.6 nautical miles and a perigee of 161.1 nautical miles. Here in Mission Control at Houston, the flight controllers began supporting Gemini 6 on Launch Pad 19 at Cape Kennedy. The 6 countdown is now at 337 minutes and 47 seconds and counting. The countdown includes a built-in 25 minute hold at T-3. The spacecraft now is in the process of being powered up and the backup crew, Virgil I. Grissom and John W. Young, are in Gemini 6 on Pad 19. They will remain in 6 until the prime crew, Walter Schirra and Tom Stafford, replace them at T-115 minutes in the count. With Gemini 7 now making its pass across North Africa, we are 181 hours and 21 minutes into the mission of Gemini 7. This is Gemini Control.

END OF TAPE

This is Gemini Control. One hundred eighty two hours and 20 minutes into the flight of Gemini 7. Gemini 7 is now sweeping across the South Pacific nearing the end of its 114th revolution around the earth. On the last pass over the Canary Islands tracking station about an hour ago, biomedical data indicated that both crewmen were awake and active. However, the crew sleep period still has about an hour to go. The Gemini launch vehicle 6 booster count is scheduled to be picked up at Cape Kennedy at T-240, which will be about 5:30 a.m. e.s.t. The Control Center here in Houston is still supporting the countdown for the Gemini 6 spacecraft on Pad 19 at Cape Kennedy. At the present time the count is standing at 277 minutes and 40 seconds and counting. With Gemini 7 now shown on our map as an Agena and making its pass across the South Pacific coming up on the west coast of South America. We are 182 minutes - 182 hours and 21 minutes into the mission of Gemini 7. This is Gemini Control.

END OF TAPE

This is Gemini Control, 183 hours and 20 minutes into the flight of Gemini 7. Spacecraft 7 is now over the Indian Ocean coming up on the Carnarvon, Australia tracking station. Just had a communication come in a few minutes ago from the Carnarvon station where the flight controller reported a temperature outside of 114 degrees. So the weather is a bit warmer there than in Houston. At the Canary Island tracking station about 35 minutes ago, the biomed data indicated the 7 crew members, Frank Borman and James Lovell were asleep or resting comfortably. All systems reported GO at LOS, loss of signal, with Canary. The Gemini 7, rather the Gemini 6 count for the launch vehicle began right on schedule at Cape Kennedy at T minus 240 minutes. That was at 5:29 a.m. Eastern Standard Time. The count on Gemini 6 with the backup crew, Virgil I. Grissom and John W. Young, in the 6 vehicle is counting and is now at 217 minutes and 30 seconds to launch time. This includes a 25 minute built-in hold at T minus 3. At T minus 115 minutes in the count the prime crew, Walter M. Schirra and Thomas P. Stafford will enter the vehicle to replace the backup crew. The launch of Gemini 6 is scheduled at the beginning of the 118th revolution of Gemini 7. With the Gemini 7 now passing over the west coast of Australia we are 183 hours and 22 minutes into the flight of Gemini 7. This is Gemini Control.

END OF TAPE

This is Gemini Control. 184 hours and 20 minutes into the flight of Gemini 7. We're now in the 116th rev and the Gemini 7 is now making a pass across the mid-Atlantic toward the west coast of Africa. The next station to have acquisition of Gemini 7 will be the Canary Islands tracking station. The crew, Frank Borman and James Lovell, are now up and ready for the day's activities. The situation at the Cape - the count is now standing at T-158 minutes and 14 seconds and counting. The weather at the Cape is partly cloudy with broken clouds at 3000 feet at times. The wind is blowing from the southeast at 10 knots, with a visibility of 10 miles. Temperature is 67 degrees and 2 to 3 feet waves off the shore. At 184 hours and 21 minutes into the flight of Gemini 7, this is Mission Control.

END OF TAPE

This is Gemini Control, 184 hours 35 minutes and 2 seconds into the flight of Gemini 7. The Gemini 7 is now over the east coast of Africa heading for the Indian Ocean and Australia. We are in the 116th revolution. We have a transmission that was taped a few minutes ago between the spacecraft 7 and the Control Center here and we will play that tape for you now.

Cap Com — Gemini 7, Houston.

S/C — Go ahead. You are loud and clear.

Cap Com — Good morning. I have some PLA updates and a flight plan update for you.

S/C — Roger. (garble)

S/C — Houston, this is Gemini 7. Go ahead an read the PLA's and I will get the flight plan later.

Cap Com — Okay, I'll read your new flight plan first. Node;185:33 43 rev 116, 126.9 degrees west, right ascension is 10 hours 00 minutes and 6 seconds. Flight Plan time-line update change 184:00:00 to 184 12 00. Time 185:40:14, crew status report on the Pilot at Texas. Time 185:58:02 crew status --

S/C — Houston, Gemini 7.

Cap Com — Go ahead Gemini 7, Houston.

S/C — Is that time 185:40:14 was that a crew status report on Pilot at Texas.

Cap Com — That is affirmative, Jim.

S/C — Okay.

Cap Com — Next item 185:58:02 crew status report on the Command Pilot at CYI, Canarys. Start on D-4/D-7 at 184 21 47, sequence 430, mode 02, pitch 30 degrees down, yaw 4 degrees left. This is a D-4/D-7 on the Gemini 6 launch, and take

S-64's on the Cape weather. The nominal time of Gemini 6 is 187 24 about. We will update that later when we get a better hack on it.

S/C Roger, could we have the time on the D-4/D-7, we didn't get that, we missed that.

Cap Com Roger, it is 187 21 47.

S/C Roger, I have it.

Cap Com Are you ready for your PLA updates?

S/C Roger, go ahead.

Cap Com Area 118-1, 186 58 39.

S/C We are not reading you, say again please.

Cap Com 118-1, 186 58 39; 19-1 at 188 34 27; 20-4, 191 25 52; 21-4, 193 01 27; 22-4, 194 37 24; 123-3, 195 24 13 -- correction there, 195 54 13; 124-3, 197 29 47. RET 400K is 21 40 for all areas and the weather in all areas are good.

S/C Roger.

Cap Com Be advised to keep your continuous adapter C-band on until TPI. We will have a test on your fuel cells coming up for you at CYI so we request no fuel cell activity until acquisition of Canary Islands. In general we intend to warm up stack 2 before purging, that's section 2. You will receive a go--no-go at Carnarvon on the next rev. That is this pass over Carnarvon, Gemini 7. How do you feel this morning. Gemini 7, Houston.

S/C Roger.

Cap Com Roger, how do you feel this morning.

Cap Com How do you feel this morning Gemini 7.

S/C Just fine. How do you read us.

Cap Com I'm reading you now. We just switched to Bermuda. Do all your systems appear good.

S/C Say again.

Cap Com Do all your systems look pretty good.

S/C Our systems are good, right.

Cap Com Good. Did you have the same tumbling rate this morning when you awakened?

S/C Negative, we haven't awakened yet.

Cap Com Oh ho ho, sorry about that.

S/C We had a very slow tumble this morning.

Cap Com Were you comfortable last night. Was the temperature a little better? Gemini 7, be advised the countdown is going very well at the Cape.

S/C How do you read now, Houston.

Cap Com I'm reading you all right. How do you read me.

S/C Sounds like you're not reading me all the time, but be advised that our tumble rates are very slow and we did not get the -- the wall temperatures are normal this morning, they are not cold.

Cap Com Very good. Be advised that the count is going very well at the Cape on Gemini 6.

S/C Good.

Cap Com The crew is up and is healthy and they are all ready to go.

That was Charlie Bassett, Spacecraft Communicator here in the Houston Mission Control Center talking to the Gemini 7 crew. The Gemini 6 countdown is now standing at T-136 minutes and 10 seconds and counting. In about 20 minutes the Gemini 6 Prime Crew should be about ready to get in the spacecraft. They are scheduled to get in and take over at T-115 minutes. We have a weather advisory here in the area of the prime recovery ship, Wasp. They have a 1500 foot cloud cover, visibility is 10 miles, wind is northeast at 6 knots, swells 5 feet with 2 feet waves. The outside temperature in the area is 71° F, and the sea water temperature is 77° F. The Wasp is now on station for the Gemini 6 launch. After lift-off of Gemini 6, the Wasp will proceed southwest to be on station for revolution 119 of Gemini 7. The present position of the Wasp is approximately 490 statute miles southeast of Bermuda. At 184 hours and 44 minutes into the flight of Gemini 7, and at T-134 minutes and 44 seconds on -- in the launch of Gemini 6, this is Gemini Control.

END OF TAPE

This is Gemini Control, 185 hours and 5 minutes into the flight of Gemini 7. Gemini 7 is now over the west coast of Australia on its 116 revolution around the Earth. The Gemini 6 spacecraft at Cape Kennedy is now at T minus 113 minutes and 35 seconds and counting. We have a tape here that was taped on the last pass over the Canary Islands; and we will play that tape for you now.

S/C This is 7, Canary. Good morning to you.

CYI And, good morning to you also. We've got some information for you on this fuel cell.

S/C Righto. Proceed.

CYI Okay. Right now, we'd like for you to open the primary cooling down circuit breaker.

S/C Roge. Open the primary cooling down circuit breaker.

CYI Roger.

S/C It is now open.

CYI Okay. We want your radiator switched to "By-Pass".

S/C Radiator switched to "By-Pass".

HOUSTON Tell him why, Canary.

CYI Okay. This is going to put you to "By-Pass" on the radiator on account of warm up at that second section. Okay? And, now what we'd like from you is a normal purge on Section One.

S/C Okay. A normal purge on Section One. Section Two boiler circuit breaker still on.

CYI Affirmative.

S/C Stand by. We want to check to see whether that circuit breaker should be on.

CYI It should be on, right, Flight?

HOUSTON Yea. Because of it's being off all night, you can leave it up for this purge.

CYI Leave it on for this purge.

HOUSTON Stand by. That's affirmative. We want the cross-over open.

CYI Okay. We want the cross-over switch on.

S/C Roger. Here's our procedure. We'll leave the cross-over switch on, and make a normal Section One purge. Hydrogen 13 seconds, oxygen 2 minutes. Is that correct?

CYI Roge. Correct.

S/C Canary. This is Gemini 7.

CYI Go ahead, 7.

S/C Would you check with Houston and find out when they want us to start getting suited and back in shape.

CYI Okay. Copy, Flight? Flight, Canary. Do you copy?

HOUSTON Negative. Say again.

CYI They'd like to know when they should begin putting on their suits to get ready for this launch.

HOUSTON Tell them we should wait until we're sure we're going to get lift off here.

CYI Say again.

HOUSTON We want to wait until we're sure we're going to get lift off. Probably after lift off.

CYI After lift off, okay. Gemini 7, this is Canary. Flight says wait a little while; and they want to make sure they get lift off first, then you can start putting them on.

S/C Roge. Thank you, a whole lot. Be advised that the first time we'd had poor communications with Houston on the last pass. I guess they were remoting us.

CYI Yea. That's right. They were. Okay. I'll give you a little preliminiary briefing of what's going to happen over Carnarvon.

Upon Carnarvon instruction, you'll go back to "Quo" on the radiator, and further probe the primary "Quo" valve circuit breaker again. Then you'll perform an open circuit double length purge on the Second Section. Do you copy.

S/C An open circuit double length purge on the Second Section.

CYI Roger. That's upon Carnarvon instruction, okay?

S/C Roger.

CYI We want to let that secondary group warm up a little bit.

S/C Second purge is complete.....(Garble).....is going off.

CYI Okay. Could you place your quantity read switch to ECS 02, please.

S/C Roger. It's on.

CYI And, we'd like a reading.

S/C 32% at 828 pounds. .....(Garble)...750 pounds.

CYI Okay. Hold it there for a minute. LH2?

S/C 28% at 460 pounds.

CYI Okay. You can go back to off on the quantity read switch. That's about all we have from here. Can we help you in any way?

S/C No. I think we're in pretty good shape.

CYI Okay. Very good. We'll be standing by.

S/C Roger.

HOUSTON Did you tape dump, Canaries?

CYI We're all through tape dumping.

HOUSTON Very good.

CYI Flight, Canaries.

HOUSTON Go ahead.

CYI Roger. We're showing an ECS control valve outlet on the secondary at about 62 degrees right about now.

HOUSTON That's about right.

CYI Okay. We have LOS. All frequencies "Go" at LOS.

END OF TAPE

.... and proceeding excellently on the Gemini 6 countdown at the present time. Astronauts Walter Schirra and Tom Stafford are about to depart from the suit trailer at Launch Complex 16 to proceed to Launch Complex 19 and board their Gemini 6 spacecraft. The count has been going excellently all morning. We have no known problems. At times, we've been as much as 20 minutes ahead on certain types of work at the launch pad itself and proceeding very well, and we are awaiting the arrival of Astronauts Schirra and Stafford at the launch pad at the present time. This is Gemini Launch Control at the Cape.

END OF TAPE

This is Gemini Launch Control at the Cape. We're now still counting at T-103 minutes and 2 seconds. Just about one minute ago the prime pilots for the Gemini 6 flight, Wally Schirra and Tom Stafford departed the suit trailer at Launch Complex 16 and are now on their way to Launch Complex 19 to board their spacecraft. They're a little bit ahead of time on their departure as the whole countdown has been this morning. We have had an excellent countdown with no known problems. Wally Schirra and Tom Stafford were awakened this morning about 5:20 a.m. EST. This gave them just about a solid eight hours sleep. They took their physical and some 15 or 20 minutes later had breakfast. Their guest at breakfast was the command pilot for the Gemini 5 mission, Astronaut Gordon Cooper. Just the three of them had breakfast with the following menu: filet mignon, scrambled eggs, toast and coffee. Astronaut Gordon Cooper, of course, is the man who holds the -- along with Pete Conrad -- holds the long duration record at the present time. This is expected to be broken by Astronauts Frank Borman and Jim Lovell in the Gemini 7 spacecraft some five to six hours from this time. The physical for Schirra and Stafford took place shortly after they were awakened and they were pronounced in excellent condition and "go" for the flight by Dr. Duane Catterson, who performed the physical examination. Wally Schirra and Tom Stafford now have arrived at 19, they're coming out of their transfer vehicle and shortly they will be in the elevator heading toward the White Room at Launch Complex 19. We are now T-101 minutes and 16 seconds and counting. This is Gemini Launch Control.

END OF TAPE

This is Gemini Launch Control at the Cape, T-98 minutes and counting, T-98. All's still looking good on preparations for the Gemini 6 flight at the present time. The prime pilots Wally Schirra and Tom Stafford are in the White Room making final checks with the technicians and getting a complete report on the status of the spacecraft from their backup pilots, astronauts Gus Grissom and John Young, who have been checking out their spacecraft for the last four hours. In a matter of minutes or so, the astronauts, Schirra and Stafford, will be ready to go over the hatch and board the Gemini 6 spacecraft. Our countdown has been going excellently with no problems. We now take you to Mission Control Center in Houston.

This is Gemini Control in Houston at 185 hours and 21 minutes into the flight of Gemini 7. The Gemini 7 spacecraft is over the south Pacific heading for the west coast of Mexico. The next station to acquire Gemini 7 will be the Guaymas, Mexico tracking station in just a few minutes. The Red Team members have come into the Control Center here and are being briefed by the Blue Team members, and also a few of the White Team members are here. We saw flight director Gene Kranz come in who went off last night around midnight, and Christopher Kraft is here along with John Hodge. We have a tape here that was taped the last pass over Carnarvon and we'll play that tape for you now.

CRO Gemini 7, Carnarvon Cap Com.

S/C Roger, Com. This is 7. Go ahead, Carnarvon.

CRO Good morning from Australia. I would like you to push your radiator switch to flow position and your primary coolant valve circuit breaker to on.

S/C Roger. Primary coolant valve is on and radiator is in flow position.

CRO OK, we'd like a read out on 2A, 2B, 2C voltages.

S/C 2A is a little high about 32 volts, 2B is also high about 32.3 volts, and 2C is also high about 32 volts.

CRO Roger. Sounds real good. OK, we're standing by now for a double length purge on section 2. An open circuit double length purge.

S/C Roger. You want an open circuit. Right?

CRO That's affirmative.

S/C I'll increase the prime and...(garble)..by two and put the cross over on, is that correct?

CRO That's roger.

S/C Okey doke. Cross over on, I'm going to ..(garble) them for 26 seconds.

CRO Roger.

S/C ...(garble)...them for four minutes.

C: Okay, while you're purging can you give us some of the readouts for your go-no-go.

S/C Roger, stand by a second please. Carnarvon, I'll give you some of these now. The RCSA reads 3,000, the temperature is 80, D is 2900, temperature 80, left secondary 02 is 5400, right secondary 02, 350 300, batteries are all okay at 23 volts, actually 22.7 volts on the main battery. Section 1A reads 7, section 1B reads 8, section 1C reads 7.5. Of course, 2A, 2B, and 2C are zero, and the main buss voltage is 25.2.

CRO Roger. 1, 2, 3, 4, 5, 6, 7, 8, 9, 0. 0, 9, 8, 7, 6, 5, 4,3, 2, 1. 1, 2, 3, 4, 5, 5, 4, 3, 2, 1. Fisher testing. 1, 2, 3, 4, 5, 5, 4, 3, 2, 1. Fisher testing. 1, 2, 3, 2, 1

HOU FLIGHT Carnarvon, this is flight. What does that radiator outlet temperature look like?

CRO I think about 5 degrees.

HOU FLIGHT That's five?

CRO Yeah, test five. 12 18 shows us 5.09.

HOU FLIGHT ROGER, In the purge right now.

CRO 18 seconds to go.

HOU FLIGHT Roger.

CRO Would you give me a reading on open circuit voltages on section 2?

S/C They are still high, at least 32 something. 2B about 32.2, 2C is still high, at least 32.

CRO Turn it off.

[illegible] Roger, would you place section 2 back on the line?

S/C Roger, section 2 going back on the line.

CRO Okay, would you give me prime readouts on this as soon as you get them.

S/C Okay, prime 2A - 2 amps, 2B - 2 amps, 2C - 4 amps.

CRO Hey, very good. Okay, we have you go on the ground for area 134-1. Update your TR clock at this time.

S/C Roger, understand go 134-1.

OU FLIGHT Did you give them.....

CRO ...(garble)... updating the TR time for area 148-1, however the go is for 134-1.

S/C Roger, understand.

CRO Okay, we've got about a minute to go here.

S/C Will you give us the time hack, please, the elapsed time hack?

CRO Roger. Reading 185 06 37, 38, 39, 40.

S/C Right on.

CRO Roger. ...(garble)... onboard readout OAMS quantity.

S/C Looks like about 25%.

CRO Roger

S/C Source pressure 1300 pounds.

HOU FLIGHT Good Carnarvon.

CRO Thank you flight. Still have C Band.

END OF TAPE

Mr. King: This is Gemini Launch Control at the Cape. We are at T-87 minutes, 39 seconds and counting in what has been an excellent countdown for the Gemini 6 mission today. We picked up our countdown with the spacecraft at 3:29 a.m. EST, and two hours later with the launch vehicle. Our weather situation looks good at the present time both at the Cape and around the tracking net. All conditions looking good; Astronauts Wally Schirra and Tom Stafford, the prime pilots, are getting settled in their spacecraft; they have now joined the countdown with the designations of crewman 1 and crewman 2. Shortly, they will be taking some blood pressure checks and making some communications checks with the Capsule Communicator in the blockhouse, Astronaut Alan Bean. We are aiming for a launch time this morning in order to have a rendezvous with the Gemini 7 pilots in orbit on the fourth revolution. We are aiming at a lift-off time of 9:54 and 6 seconds a.m., EST. Of course, we still have a 25 minute built-in hold that if all goes well will be declared at the T-3 minute mark in the countdown. All conditions looking good at the present time, T-86 minutes, 15 seconds and counting. This is Gemini Launch Control.

END OF TAPE

This is Gemini Launch Control at the Cape, mark, T-78 minutes and counting, T-78. All still going excellently with the Gemini 6 mission at the present time. About 1½ minutes ago the hatches were sealed on the Gemini 6 spacecraft and Astronauts Wally Schirra and Tom Stafford continue their initial checkouts with the Capsule Communicator in the blockhouse, Astronaut Alan Bean and with the Mission Control Center in Houston. All going well with the countdown as it has been going all morning long. To recap the activities we picked up our countdown with the spacecraft at about 3:29 a.m. eastern standard time this morning and the launch vehicle met the countdown 2 hours later. Astronauts Wally Schirra and Tom Stafford were awakened at 5:20 a.m. eastern standard time after a good 8 hours of sleep. They proceeded to take their physical and were pronounced physically fit, in excellent condition, and go for the mission by Dr. Duane Catterson. Breakfast followed at the crew quarters with one guest, Astronaut Gordon Cooper, the command pilot for the Gemini 5 mission. An interesting point here is that Cooper and Pete Conrad who set a duration record of 7 days 22 hours and 59 minutes will probably have that record broken some 5 to 6 hours from now as Jim Lovell and Frank Borman continue in their orbit on Gemini 7. The Astronauts Schirra and Stafford left the crew quarters at the T-180 minute mark in the countdown and proceeded to the suit trailer at launch complex 16. They arrived at the launch pad 19 on time and boarded their spacecraft at about the 90 minute mark in the countdown some 15 minutes ago. All is going well. As far as weather conditions are concerned, we have partly cloudy conditions in the Cape Area, it is broken at about 3000 feet, winds southeast at 10 knots, temperature of about 67 degrees and a sea state of 2 to 3 feet. Weather around the tracking net also is acceptable in all areas. We have one interesting situation in the

Indian Ocean. The weathermen call it a unique situation where we have two tropical storms, one 12 degrees north and the other 12 degrees south of the Equator in the Indian Ocean. Astronauts Frank Borman and Jim Lovell have not been able to take a look at the -- this oddity in the weather in the Indian Ocean because it has been in darkness during their passes and also, of course, they were asleep during most of the night. All going well at the present time. We are aiming for a lift-off time here at 9 54 06 a.m. eastern standard time. We still have a complete 25 minute hold time remaining. If all continues to go well in the count this hold will be declared at the T-3 minute mark. It is now T-74 minutes 46 seconds and counting. This is Gemini Launch Control.

END OF TAPE

Mr. King: This is Gemini Launch Control at the Cape, T-58 minutes and counting. T-58, all going excellently on preparations for Gemini 6 launch. Astronauts Frank Borman and Jim Lovell have just made a pass over the United States and are now going over Africa at the present time. During this period, the prime pilots for the Gemini 6 mission, Astronauts Wally Schirra and Tom Stafford, have been going through some of the final switch checks in their Gemini 6 spacecraft. The Gemini 6 spacecraft has probably been the most tested spacecraft that we have attempted to fly today. All situations still going excellently at the present time. We are looking forward to a 25 minute hold coming later in the countdown. If all goes well, this hold will be at the T-3 minute mark in the count. Currently, T-57 minutes, 7 seconds and counting. This is Gemini Launch Control.

END OF TAPE

Houston here, we are 186 hours into our Gemini 7 mission and during that swing across the States just a few minutes ago, Frank Borman sounded exuberant. He said I feel like a million dollars this morning, I got the best sleep I've had in the whole flight. He said he got 6 hours of very solid sleep and he said Jim Lovell rested well too. They signed off toward the end of the pass, Frank Borman said Well, we are going to have a little breakfast now and we will see you later. Right now the Canary Station is talking with 7, they are getting a crew status -- I'm sorry, they are talking with 7, but the crew status report on Jim Lovell will come from Carnarvon about 30 or 35 minutes from now. This is Gemini Control Houston.

END OF TAPE

This is Gemini Launch Control at the Cape, at T minus 48 minutes and counting. T minus 48 and all is still going well with our Gemini 6 countdown here at Launch Complex 19. Astronauts Wally Shirra and Tom Stafford, the prime pilots for the mission, have just completed a series of checks of the spacecraft dials to insure that the various pressures, the Environmental Control System, and their fuel readings are all on the indexes as planned. All is going well. We have just made a status check of all elements concerned with the mission in preparation for taking down the launch vehicle erector. This will occur at about the T minus 35 minute mark in the countdown. The flight room personnel, the technicians who aided the prime pilot and pilot, Tom Stafford, up to hatch closure a while ago now have departed from the White Room. They were cautioned by Wally Shirra to be careful going down that elevator now. They departed from the White Room just a short while ago. The astronauts continue making a check of the spacecraft. All is looking well. We still have that 25 minute hold. We have not had to use any hold time in our countdown thus far. If all continues to go well, that hold will be declared at the T minus 3 minute mark in the count. Now T minus 46 minutes, 39 seconds and counting. This is Gemini Launch Control.

END OF TAPE

This is Gemini Launch Control at the Cape, T-41 minutes 53 seconds and counting. Approximately one minute ago we started lowering the 138-foot erector at Launch Complex 19. Wally Schirra's comment at that time was, "It looks kind of blue out there," as the erector started to come down. We are about 5 minutes ahead on the erector lowering, at least as far as the countdown is concerned and this has been the story of the countdown all morning long. Everything has been going excellently and we have been ahead on many of the work programs at various times. Wally Schirra was talking with the Flight Director Chris Kraft as the erector began to come down, Chris Kraft advised the Command Pilot of Gemini 6 that the Gemini 7 Pilots were now over Africa. Wally's comment was, "Roger, we will expect them around next time, I guess." All still going well on the Gemini 6 preparations here at Cape Kennedy, T-40 minutes 56 seconds and counting. This is Gemini Launch Control.

END OF TAPE

This is Houston. 186 hours into our Seven flight, with the crew sailing over the east coast of Africa. They're having breakfast now. We've had no conversation with them since the Canary Islands. Now, let's go down to the Cape and see how Six is doing.

This is Gemini Launch Control at the Cape. We're at T minus 37 minutes, 40 seconds and counting. All is still going excellently at Launch Complex 19. The erector is now down. The command pilot, Wally Shirra, and the pilot, Tom Stafford, are chatting with Mission Control, Houston and with the Capsule Communicator in the block house designated "Stoney". That's astronaut, Alan Bean. All's still looking good at the present time. We've had an excellent countdown. We still have that 25 minutes worth of hold time. We have not had to use it yet; and the plan is, if all continues to go well, that we will declare a hold of 25 minutes at the T minus 3 minute mark in the countdown. We'll be aiming for a lift off, if all continues to go well, at 9:54 and 6 seconds a.m., Eastern Standard Time. Now T minus 36 minutes, 50 seconds and counting. This is Gemini Launch Control.

END OF TAPE

This is Gemini Launch Control at the Cape, T-27 minutes 57 seconds and counting. All still going well with our launch preparations for Gemini 6. At the present time in the Gemini 6 spacecraft, Astronauts Wally Schirra and Tom Stafford are going through some power checks with the Spacecraft Test Conductor, Don Kromer in preparation for a static test of the spacecraft propulsion system due some 5 to 10 minutes from now. This is the Orbit Attitude and Maneuvering System which will actuate the test fired on the pad with brief bursts from the 25-pound thrusters at about the 15 minute mark in the countdown. All is going well at the present time and we have had no problems whatsoever during this countdown. We still have the 25-minute hold which will be declared at the T-3 minute mark if all goes well to tie in the launch time of Gemini 6 for the rendezvous with Gemini 7 coming up four revolutions after insertion into orbit. All going well, T-26 minutes 53 seconds and counting. This is Gemini Launch Control.

END OF TAPE

Gemini Control, Houston, here. We're 186 hours, 41 minutes into the flight of Gemini 7. The spacecraft is over Carnarvon; and they're talking intermittently with Borman and Lovell. Let's cut down there and see what's going on.

CRO PCM count was 169 on that

HOUSTON Roger. I copy.

CRO We've completed the tape dump.

HOUSTON Roge. Completed tape dump.

Well, they've apparently wrapped up the conversation for this pass. It was brief discussion on the Section Two fuel cell, which was turned off overnight. It came up this morning, bright and strong; even Stack C, which has behaved somewhat indifferently over the past week. The amperage was well up this morning; up around 4 amps. Yesterday, it was lagging down to about 1.5. It was turned off overnight so the crew could get a good rest and not have to go through the necessity of purging it, individually or pampering it throughout the night. Section One continues to hold up very well; as we say, this morning both fuel cells up and sharing their load very nicely. It's been back on the line now for about 90 minutes. Our present orbit for Gemini 7 is 161.5 exactly circular, as best flight dynamics officers here can estimate it. Now, we'll go to the Cape and check on the progress of Gemini 6.

This is Gemini Launch Control at the Cape with T minus 15 minutes, 45 seconds, and counting. Our countdown continues, but we still have a 25 minute that will come at the T-3 minute mark in the count. That puts us some 40 and a half minutes away from the Gemini 6 lift off. We have just completed a check of the spacecraft propulsion system by firing 1.5 second bursts of the 25 pound thrusters aboard the Gemini spacecraft. We have some 665 pounds of propellants aboard Gemini 6. This large amount of propellant, of course, are necessary for the very difficult rendezvous maneuvers that will take place. We have completed our checks of the

Propulsion System. This is our final check on the ground. It also helps to bleed the system, that is to get the propellants into the proper position for use. All is still going well here. We're at T minus 14 minutes and 54 seconds; but still have that 25 minute hold to use after the T-3 minutes mark. This is Gemini Launch Control.

END OF TAPE

*Included rev 117 Stateside pass with no commentary air/ground only. NOT AIRED.

Canary	...., Canarics.
Cap Com	Go ahead Canaries.
Canary	Roger, are you going to hold the cryo quantities until Carnarvon.
Cap Com	Say again.
Canary	You want to hold the cryo quantity readouts until Carnarvon.
Cap Com	Negative. We want you to get some cryo readouts after you purge that section 1.
Canary	Okay, will do. Canary has telemetry solid.
Cap Com	Roger Canaries.
Canary	Gemini 7, Canary. Com check. How do you read.
S/C	This is 7 Canary. Good morning to you sir.
Canary	And good morning to you also. We've got some information for you on this fuel cell.
S/C	Go ahead.
Canary	Okay, right now we would like for you to open the primary coolant valve circuit breaker.
S/C	We will now open the primary coolant valve circuit breaker.
Canary	Roger.
S/C	It is now open.
Canary	Okay we want the radiator switch to bypass.
S/C	Radiator switch going on bypass.
Flight	Tell him why Canaries.

Canary Okay, this is going to put you to bypass on the Radiator and kind of warm up that second section. Okay? All that we would like from you is a normal purge on section 1.

S/C Okay, a normal purge on section 1 and section 2 primary switch, of course, is still off.

Canary Affirmative.

S/C Stand by, we want to check to see if the crossover should be off or on.

Canary It should be on, shouldn't it Flight.

Flight No, the crossover has been off all night, you can leave it off for this purge.

Canary Leave it off for this purge, okay.

Flight Stand by. That is affirmative. We want the crossover open.

Canary Okay, we want the crossover switch on.

S/C Roger, here is our procedure. We are going to turn the crossover switch on make a normal section 1 purge, hydrogen 13 seconds and oxygen 2 minutes. Is that correct?

Canary Yes, that is correct.

S/C Canary, this is Gemini 7.

Canary Go ahead 7.

S/C Would you check with Houston and find out when they want us to start getting suited and want me to start ... back at the Cape.

Canary Okay. Flight. Flight Canary, did you copy.

Flight Negative, say again.

Canary They would like to know when they should start donning their suits to get ready for this launch.

Flight Stand by. Tell them we should wait until we are sure that we are going to get lift-off here.

Canary Say again

Flight We want to wait until we are sure about lift-off. Tell them probably after lift-off.

Canary After lift-off, okay. Gemini 7, this is Canary. Flight says that you can wait a while and they want to make sure they get lift-off first before you put the suit on.

S/C Roger, thank you, we will hold off. Tell them that the first time we had poor communications when we were talking to Houston on that last pass. I guess they were remoting a switch.

Canary Yes that's right. They were. Okay, I'll give you a little preliminary briefing about what is going to happen over Carnarvon. Upon Carnarvon instructions we will go back to "quo" on the radiator and further probe the primary quo valve circuit breaker again. And then you will perform an open circuit double length purge on the second section. Do you copy.

S/C An open circuit double length purge on the second section.

Canary That's right, that is upon Carnarvon instruction, okay?

S/C Roger.

Canary We want to let that secondary on to let it warm up a little bit.

S/C Section purge is complete, the quo valve is going off.

Canary Okay, could you place the quantity read switch to ECS O_2 please.

S/C Roger, it's on.

Canary And we would like some readings.

S/C 32 percent and 820 pounds, we have 450 pounds.

Canary Okay, hold it there for a minute, LH2.

S/C 28 percent and 460 pounds.

Canary Okay, you can go back to off on the quantity read switch. That's all we have from here. Can we help you on the ground.

S/C No, I think we are in pretty good shape.

Canary Okay, very good. We will be standing by.

S/C Roger.

Flight Did you tape dump Canaries.

Canary We are all through tape dumping, commanded it off.

Flight Very good.

Canary Flight, Canaries.

Flight Go.

Canary Roger, we are showing the ECS control valve outlet temp on the secondary about 62 degrees right now.

Flight That is about right.

Canary Okay. We have telemetry LOS. All systems go at LOS.

Flight ... Houston Flight.

Carnarvon Go ahead, Carnarvon.

Flight What was the -- what were the main currents after you brought the two cells up?

Carnarvon Main currents, oh let's see, I never did get a readout from the other (garbled).

Flight Total current on both cells.

Carnarvon BH01 is 8.7, BH02 is 10.1, Did you copy Flight.

Flight I copies, but which one is cell 1 and which one is cell 2, please.

Carnarvon Do you want us to read out the sections?

Flight Negative. Just tell me which fuel cell is which.

Carnarvon Okay, 8.7 is fuel cell 1.

That doesn't sound right, main bus number 1.

Flight You said 8.7 and fuel cell number 2 is 10?

Carnarvon That can't be right because the readings he gave me were 2 amps, 2 amps, and 4 amps on the three sections. That comes out to be pretty close to 8.

Flight That is the reason I'm going through all this dity here.

Carnarvon Flight, standby. We will try to get this all squared away and give you an accurate reading.

Flight That is what you get for talking to me in those H01 bits.

Carnarvon Righto. Okay Flight. Section 1 is carrying 8.7 amps of a load at LOS and section 2 has now picked up 10.1 amps of a load.

Flight Roger.

Carnarvon Anything else you want on that.

Flight That's all.

Guaymas Guaymas has acq aid contact.

Flight Transmitting loud and clear Guaymas.

Guaymas Roger, thank you. AFD, Guaymas Cap Com.

Flight All right, go ahead Guaymas.

Guaymas Roger, we have acq aid contact. We are following him across waiting for Texas.

Flight Roger.

Guaymas AFD, Guaymas

Flight Go ahead Guaymas.

Guaymas Well, since we haven't got a TM I would like to ask you a question here while we are waiting on Texas.

Flight Go ahead.

Guaymas Isn't this minimum pressure on the fuel cell --

Texas Gemini 7, Texas Cap Com.

Guaymas I'll call you back later.

S/C Go ahead Texas. This is Gemini 7.

Texas Roger, we would like to place your TM standby switch to the real time position, and it will be left there for the duration of the rendezvous phase, over.

S/C Roger, standby TM to real time. You are very very weak Texas.

Texas Texas has solid TM and systems are go on the ground. This is Texas Surgeon. A valid temp on the Pilot of 98.4.

Flight Roger Texas. We copy 98.4.

Texas Gemini 7, Texas has you go on the ground.

S/C Roger, thank you. We read you now loud and clear.

Texas Houston Flight, we have initiated a tape dump and --

S/C ..... (garbled)

Texas Gemini 7, Texas. Say again please.

S/C I say was your last instruction to place the standby TM switch to the real time position?

Texas That is affirmative and it will be left there for the duration of the rendezvous phase, over.

S/C Roger, what about our DCS circuit breaker. Do you want that opened up?

Texas Negative. We are getting a tape dump at this time.

S/C We would like to confirm the last nodal update also. Was it west or east?

Flight We will give him that in a minute, Texas.

Texas It was west and Houston will confirm in a minute.

S/C Thank you.

Surgeon Again Texas Surgeon.

Texas Is the Houston Surgeon taking the aeromed. I see no indications of any aeromed paths on our Sanborn.

Surgeon I understand. We are waiting for Texas to go prime -- the MCC to go prime.

Texas Roger.

Flight This is Houston Flight, we are going to go prime. Stand by.

Texas .... (garbled)

Cap Com Gemini 7, Gemini 7. Do you read.

S/C Loud and clear.

Cap Com Roger. Good morning.

S/C Good morning.

Cap Com Could you give us a quick readout on section 2 stacks, amperages only.

S/C He just got the therometer in his mouth. You want a crew status report.

Cap Com We are going to get that in just a second.

S/C Okay. Section 2 is now reading 4 amps, or correction, 2A is about 1.5 amps, 2B is about 2 amps, and 2C is about 4.5 amps.

Cap Com Roger. We have a valid temperature. Give us a blood pressure

and stand by for the Surgeon.

S/C Rog.

Surgeon Cuff is full scale.

Cap Com Cap Com, do you have a delta P light, on section 2.

Texas That is affirmative and also we have completed the tape dump.

Cap Com Did you have telemetry before you had him go to standby at a real time position.

Texas Negative Flight, we did not.

Surgeon Gemini 7, we have a valid blood pressure. You can start your exercise.

S/C Roger, Chuck, while he is exercising, do you have time to take the report.

Surgeon Rog. We are ready. I'd like to get the sleep report first, Frank, and I think it is pretty important that we get a good hack on the sleep this time because we are trying to build some data down here, so could we get a pretty good rundown on how you did last night.

S/C I had 6 hours of the best sleep I've had since I've been up here. It was excellent. I feel like a million dollars this morning.

Surgeon Very good. Much better without the suit, huh?

S/C Right. Jim had 6 hours of suited sleep and he -- sort of off and on, but he feels pretty good.

Surgeon Okay, very good. Blood pressure is full scale. Frank, you want to go ahead with the food report then.

S/C Roger. Last night we had meal C, there wasn't any date on it, it was meal C and it consisted of tuna salad, fruit cake and apricot pudding but we lost the date on it.

Surgeon It did not have a day number, meal C is that all.

S/C We lost the day number.

Surgeon Roger, copy. You lost the day number. On that blood pressure the telemetry dropped out. Could we get another blood pressure.

S/C Stand by.

Surgeon Water report.

S/C Command Pilot has had 498 ounces of water, total for column 5 is 19, column 6 is 2. Pilot's had 607 ounces of water column 5 is 18, column 6 is 4.

Surgeon Roger, copy. Frank, can you conveniently get a reading off the water gun right now. Just a total off the gun.

S/C Stand by. .....(garbled)

Surg eon 7, say again. Gemini 7, turn off your DCS circuit breaker.

S/C Roger, it's off now.

Surgeon Did Jim send another blood pressure.

S/C Roger, coming up.

Surgeon Did he send one a minute ago.

S/C No, stand by.

Surgeon Okay, well listen. Don't,stop it, delete it because it is not coming through from the Cape. There is something wrong with the TM setup right now so delete the blood pressure. We are going to need this data on this exercise and the response after the exercise, it is two of the things that we are plotting on suit versus the non-suit configuration here. We are going to need it on both you and Jim, so we may have to repeat this exercise period on Jim somewhere over one of the next sites here. We will get to you as soon as we can figure out where is the best place to do it.

S/C That's all right with us.

Surgeon Roger.

S/C We are going to eat a little breakfast now.

Surgeon Frank, what about the exercise before meals. Have you been doing that the last few days.

S/C Haven't missed one, Chuck.

Surgeon Haven't missed what?

S/C Haven't missed one.

Surgeon Good. Was it any harder to do -- as far as the actual movement of the -- with the exerciser -- is it any different when you are in the suited or unsuited condition?

S/C I'll let Jim answer that.
Definitely Chuck, It is very difficult to exercise with the suit on as compared to the suit off, relatively speaking.

Surgeon We have noticed this in your times to complete the exercise. There is a lot of difference between whether you are suited or unsuited. You can do it much faster, about half the time when you are unsuited, it appears.

S/C Right you got much more mobility. I can do a lot of different exercises with the suit off than I can with it on. I can arch my back and everything like this. I can turn around and everything.

Surgeon Roger. Fine. I'll turn you over to Cap Com.

S/C Okay.

Cap Com Gemini 7, place your acq beacon circuit breaker off.

S/C It's off now Cap Com.

Cap Com And place your real-time transmitter circuit breaker off.

S/C Real time circuit breakers off.

Cap Com Roger, and I have your node update if you are ready to copy.

S/C Roger.

Cap Com You can copy.

S/C Go ahead.

Cap Com Time 185 33 43, rev 116, 226.9 degrees west, right Ascension 10 00 06. Do you copy.

S/C Roger, we copy.

Cap Com And did you have your flight plan time line update change okay.

S/C That was 12 minutes, isn't that correct. 12 minutes.

Cap Com That is correct 12 minutes.

S/C Rog. For your information, GT-6 is inserted. Both pilots are in and we have closed the hatches and everything is looking real good.

S/C Very good.

Cap Com And we observe that your delta P light is on, is that correct?

S/C Roger, it was off for a half-hour last night and then came back on, and it has been on since.

Cap Com Okay Frank. We will see you next time around.

S/C What is the lift-off time on 6.

Cap Com Roger. Your time it would be 187 24 06.

S/C Roger 187 24 06.

Cap Com That is affirmative.

S/C Thank you.

END OF TAPE

This is Gemini Launch Control at the Cape, T-8 minutes and counting, T-8 minutes and counting. In five minutes we will encounter a hold however, a planned hold at the T-3 minute mark and this hold will last some 25 minutes. We have just gone through one of the final milestones in the latter parts of the countdown and that is the final status check. Just been completed, all elements reported in that they were go for the launch of Gemini 6. During the brief periods that Wally Schirra and Tom Stafford have not been reporting back to the blockhouse and Mission Control at Houston, they have had a chance to look around a little bit through the top of their spacecraft, through their spacecraft windows, and Wally reported a jet going by some 10 minutes ago, and also mentioned that there were quite a large number of what he described as flying ants on the spacecraft. He agreed with test conductor, Don Kroner, that the flying ants would get a surprise and a short ride. We're at T-7 minutes and counting with a hold coming up at T-3 minutes for 25 minutes. This is Gemini Launch Control.

END OF TAPE

Mr. King: This is Gemini Launch Control at the Cape. We are at T-3 minutes and holding. This is the plan hold, and the duration is expected to be some 25 minutes. We have had a perfect countdown thus far today, and the planned hold time must now all be used up during this period in order to get us off with Gemini 6 at the correct time for the rendezvous maneuver. The Flight Director, Mr. Cris Kraft, has just notified the launch pad the lift-off time will be the same as he reported earlier, and that is 9:54 and 6 seconds a.m., EST. We are now holding at Launch Complex 19 and everything is still going excellently at the present time. This is Gemini Launch Control.

END OF TAPE

This is Gemini Launch Control at the Cape. We're still holding at T minus 3 minutes. We're several minutes into the hold. Astronauts Wally Shirra and Tom Stafford sitting easy in the spacecraft, checking occasionally with the Spacecraft Test Conductor and the Flight Director in Houston. Now, let's take you to Houston Mission Control where we'll be updated on the status of the Gemini 7 mission.

Houston here. Gemini 7 is now between Canton Island and Guaymas. We expect contact at Guaymas in about 10 minutes. We've had no further contact since we left Carnarvon some 20 minutes ago. We're all set for lift off here. We've had a lot of conversation between the two shifts this morning. Everybody filled in on the progress overnight. And, at 187 hours, 1 minute into the 7 mission, we're all set for another. This is Houston.

END OF TAPE

This is Gemini Launch Control at the Cape. We are still at T-3 minutes and holding. We are now 15 minutes into the planned 25 minute hold. We plan to pickup in about 10 minutes leading to a liftoff at 9:54:06 a.m. EST. During this hold period both in the blockhouse and the spacecraft, we are monitoring various systems to insure that we'll be set for the pickup of the count some nine minutes from now. All is still going well. After we pickup the count at T-3, one of major efforts during this final phase of the countdown will be to make our final guidance fixes with the launch vehicle and spacecraft. That is feeding in the proper launch azimuths to insure that we'll be inserted into the proper orbit for the rendezvous mission. We will get the ignition of the Titan II launch vehicle at zero in the countdown. Three point 4 seconds after when the first stage thrust reaches 77 percent of its total, the launch vehicle will liftoff. So that gives us zero at 9:54 and 3 seconds and a liftoff at 9:54 and 6 seconds EST. All is still going well in our hold. We expect to pickup some 8 minutes from now. This is Gemini Launch Control.

END OF TAPE

Gemini Control, Houston, here at 187 hours, 16 minutes into the flight of 7. The Guaymas...The Texas Cap Com now at Corpus Christi has just advised 7 that he is "go" on the ground and need not acknowledge; and, we just don't know if they will or not. Let's tune in there, as they swing over Houston; and see if there is any conversation.

TEXAS ....on is ready for it to go.

S/C Ready to go.

TEXAS Go ahead, Flight. Gemini 6 is fueled up and ready to try.

HOUSTON Roger. It's go for launch.

TEXAS Roger. Gemini 7, Texas. Houston reports weather at the Cape is "go" for launch.

S/C I know that. I just wondered how it's going to be for our purposes; but they're probably busy down there.

HOUSTON Stand by, Texas. I'll give them a reading.

Gemini Control, Houston, here again. Two fairly quiet astronauts here this morning who are expecting two visitors very shortly. Let's go down to the Cape right now and find out what's doing with Spacecraft 6.

This is Gemini Launch Control at the Cape. We're still holding at T minus 3 minutes. We have just seven minutes left of the hold before picking up and aiming for our launch time of 9:54 and 6 seconds for the lift off of Gemini 6. We've just had a final status check prior to resuming the count. All elements checked in as "go". Wally Shirra, the command pilot of Gemini 6, checked in as fueled up and ready to try. We're now just a few minutes away from resuming the count and still at T minus 3 minutes and holding. All looking well at Launch Complex 19. This is Gemini Launch Control.

END OF TAPE

This is Gemini Launch Control at the Cape. We're now some 10 seconds away from resuming the count at T minus 3 minutes on the Gemini 6 mission. Coming up shortly. Mark. We're at T minus 3 minutes and counting. T minus 3 on the Gemini 6 mission. All looking good at the present time. We've gone through a complete check list once again; and we are counting; leading up to a launch just a short while from now. This is Gemini Launch Control at the Cape.

END OF TAPE

Now at T-90 seconds, T-90. The launch vehicle has gone on internal power. T-1 minute and 20 seconds. As we lead up to the final moments of launch, to repeat an earlier announcement, we will have ignition at 0, and some 3 seconds after ignition, the launch vehicle will lift off on the start of the Gemini 6 flight. T-60 seconds and counting, T-60. T-50, Astronaut Schirra is making some final com. checks. T-40 seconds and counting. During the final 10 seconds of the count, Astronaut Alan Bean will give the count to the Astronauts in the spacecraft. T-30. T-25 seconds and counting. The pre-valves on the launch vehicle have been opened. This permits the propellants to come down just above the thrust chamber. T-15 seconds and counting. 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0.

Haney: We've got a shut-down. No lift-off. The engines have shut down. Fuel pressure is lowering, Wally Schirra says. Apparently a safe condition. The fuel pressure is down to about 32. We are watching the fuel pressure lower very carefully. Oxidizer pressure lowering nicely. Blockhouse is asking for a read-out on all tank pressures. Elliot Sea is putting in a call to 7 to advise them that we will not have a lift-off. Frank Borman says, "Roger, we saw it. We saw it light up; we saw it shut down." He assures Frank Borman that everything is still OK on the ground here, and we will keep him advised. Tom Stafford and Wally Schirra talking now about what they saw at the moment of ignition, and then how they saw the various pressure gages and dials start dropping. Just as we did here in Houston, and as I'm sure they did in the blockhouse. That shut-down would have come before 1.6 seconds. It's approximately at that point where we reach 77 percent of our full thrust, and beyond that point, an on-the-pad shut-down is not possible. Very quickly, there are two theories here on what caused the shut-down: (1) it was an automatic switch-over, which is a condition which automatically shuts down the engine.- that is a guidance switch-over from primary to secondary guidance. This can occur in the first second and a half and cut the engines down. (2) another theory is there was some erratic behavior in the hydraulic lines in

the primary or the secondary, which could have also caused an immediate shut-down. We are conferring now with the Flight Director. When we have additional information, we will come back to you. 7 has been advised. They apparently saw the light-up from the air as it swung over the Cape, and they saw it shut down. This is Gemini Control, Houston at 187 hours, 28 minutes into the flight of 7.

END OF TAPE

Gemini Control Houston here. Our situation is this. The lock out, the shut down came from the programmer in the launch vehicle. Something in the sequence of events that was out of spec or perhaps the programmer itself was, in any case, it shut the bird down. We did get a liftoff signal which would be an indication that one of the plugs in the base of the bird did disconnect. An unusual turn of events. The Mission Director has advised that we will tentatively attempt to recycle this mission four days from now. We believe we can go in and work on the bird in that time, repair whatever is necessary, and perhaps launch 6 four days from now. This is Gemini Control Houston.

END OF TAPE

This is Gemini Launch Control at the Cape. We now have our launch vehicle back in safe condition as far as its stand on Launch Pad 19 is concerned. That is, all the range safety destruct systems have been put back in a safe condition. They were on just at the time of ignition. They are now back in safe condition on the Pad. Our normal recycling procedures are going on at the Pad at this time, insuring that we are in a safe condition all the way. When Wally Shirra, just at ignition, received information as he said, of course, on his own consoles, that we had a shut down; when he was told that the tail plug apparently had fallen out from the base of the launch vehicle, the following was his quote: "Those things happen. It could happen to anyone. No one was hurt." He then followed up a short while later, coming over the intercom, and telling the people in the block house, quote: "You did your best." When he was informed that the recycling plan...of the recycling plans and that we will make an attempt again on Gemini 6..or intend to make an attempt some 4 days from now, Wally's quote was: "Very good. We still want to go up and see them." That is our situation now here at Cape Kennedy. We will now switch you to the Manned Spacecraft Center in Houston.

This is Houston. Over the Canaries, the 7 crew got a pretty thorough briefing on the status of 6 and what happened there. And, we now have available the tape from the pilot conversations. There is some 7 talk in here. You can also hear Wally Shirra talking. This tape starts at T minus 90 seconds, on the intended 6 lift off. And, we'll play that conversation for you now. It lasts all the way through the Canary Islands. Here's the tape.

HOUSTON They're cleared for take off.

S/C 7 Roger. Scramble one.

CAPE The pre-valves are open.

S/C 6 That's about the best news we've had.

CAPE Roger. Adios. Minus 30 seconds.

SHIRRA So, there you are.

CAPE Mark 20 seconds.

SHIRRA Right.

CAPE Mark.

SHIRRA Very Good.

CAPE 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, ignition, ... Shut down, Gemini 6.

SHIRRA My clock has started.

CAPE Verify flight programmer reset.

SHIRRA That's right. Fuel pressure is lowering, slowly.

CAPE Roger, Gemini 6. Monitor tank pressures.

SHIRRA Oxidizer pressure's down to about 32.

CAPE Roger... Wally, I'm watching it.

SHIRRA Okay, keep an eye on it. Well, we've switched over to guidance.
Oxidizer's down to 28.

CAPE Roger, Gemini 6. All tanks are venting.

SHIRRA Okay. No problem on these tanks?

CAPE Negative.

HOUSTON Give me a read out on all tanks.

CAPE How about a reading? Our pressures are venting, Flight. No problem.

HOUSTON ...on these tanks. Is that correct?

CAPE That is affirmative. All tanks are venting. Fuel tanks are
venting. Chris, do you see any problems?

HOUSTON Roger.
Tanks are venting. Bird looks good.

CAPE Roger.

....report.

CAPE ...looks good.

S/C 6	We understand.
CAPE	We have no fires.
HOUSTON	Observer, give me a read out.
....	Copy 20.
....	Control.
CAPE CONTROL	6TC, be advised it'll be approximately 20 minutes before we can get out there.
S/C 6	That's okay. We're just sitting here breathing.
CAPE CONTROL	Roger.
S/C 6	Hi, Frank. I know you guys did your best.
CAPE CONTROL	OPC. ...on the northeast side of the pad. We just want to know which sprays are on.
S/C 6	OPC, this is CM-1.
CAPE CONTROL	We'll keep the net clear.
S/C 6	OPC, CM-1.
CAPE CONTROL	Alright, CM-1.
S/C 6	Okay. Can we.... Are we perfectly safe? We don't need to stand by for the suits?
CAPE CONTROL	Just stand by, One.
.....	Give me a read out.
...	100 PC.
	Lines in...did you get a lift-off?
	***Note: There was some badly garbled conversation here between various ground personnel .
CM-1	CM-1, CM-2, initial evaluation is the possibility a tail plug may have fallen out giving us this indication.
CM--2	Lift-off?
CM-1	Roger.
TC	1, TC

CM-1 Go ahead TC.

TC Things look okay here, you can go ahead and stow your "D" rings.

CM-1 Okay, we'll shut you off and try and take care of this....

CM-1 TC, CM-1 & 2, we'll be listening in, we're off the continuous intercom lead. We can discuss our situation

TC Roger..uh..We're still monitoring tank pressures. We see no problems right now, but I guess we ought to stay in a position to abort should we have to.

CM-1 You want us to get the B-Rings in there?

..... That.....19.

CM-1 Go ahead, TC.

TC Understand your squib buses are safe. You can go ahead and stow your B-Rings.

CM-1 ...(Garble)...

TC Say again.

CM-1 I'm going to turn off my squibs here.

TC We have your squibs disarmed, CM-1.

CM-1 Roger. So am I.

TC CM-1, TC. Be advised we have a small propellant leak down at the base. We see no problem.

CM-1 Very good. What sort of egress system do you plan on using, Frank?

TC We'll bring the erector up and bring you down normally. This is just a minor leak. It's just one of our drain lines that fell off.

CM-1 Right. Got any...yet?

TC Say again.

CM-1 Do you have any diagnosis of our problem yet?

C Roger. It looks like one of the tail plugs fell out.

CM-1 Roger.

TC Did you get a clock start?

CM-1 That's affirmative, we did.

TC Roger. That's what happened.

CM-1 Okay.

CAPE CONTROL Mighty cool head there, Wally. We appreciate it.

CM-1 Part of that good training we had in the trainer. We'll stand by for a moment.

**Several portions of conversation are badly garbled.

TC Be advised all tanks except Stage One Fuel are blanked pressure. We'll try to maintain 2 PSI on Stage One Fuel.

CM-1 Roger.

C One, this is TC.

CM-1 Go ahead.

TC Did you get the DCS power circuit breaker off?

CM-1 Okay. It's off.

TC Did he get.....Did...Never mind. Flight, this is TC.

HOUSTON We're talking to 7. ...(Garble)...

TC Roger. We'll stand by.

HOUSTON Gemini 6. Did you call Houston?

CM-1 We did. Tell Frank and Jim we still want to come up and see them. We're pretty well positioned here; but I'm still sitting on a tight edge. You're darned tooting. You're right. I've seen that one before. Right, that's for sure, Chris. Okay, we'll give it a good crack here, Chris. Thanks for your help.

(Shirra's conversation was with Flight Director Kraft, whose replies were on another circuit not recordable.)

KRAFT On that basis, we would be looking at an 8:43 a.m. Eastern Standard Time lift off. That's 11:18:13 on the 12th day.

S/C 7 What was that 11:18:13 you gave me?

KRAFT That doesn't make sense with what we've got here. Stand by. That's 8:43 Eastern Standard Time.

S/C 7 Roger.

CYI Canary.

S/C 7 Go ahead, Canary. This is Gemini 7.

CYI Okay, we have a little bit of information for you. It seems like they.....

Houston here. Now we pick up the conversation between Seven and the Canary Islands. By this time, Seven had reached the Canaries.

CYI ....it stands right now, it looks like the four day recycle time, which would make that about 8:43 a.m., that's Eastern Standard Time, the 12th day.

S/C Roger. Did they actually get a light off?

CYI I don't believe so. Stand by. They didn't get a light off, did they, Flight?

HOUSTON That's affirmative. They got a light off, Canary.

CYI They did, huh?

HOUSTON They got ignition and a hold kill right afterwards.

CYI They say they got ignition and a hold kill right afterwards.

S/C 7 Roger. This is 7, standing by.

CYI Roger. ...(Garble)...

HOUSTON Say again.

CYI Did you get that last remark they made?

HOUSTON Yes, they said Gemini 7 target was standing by.

CYI ...(Garble)...

HOUSTON Roger, and friendly target vehicle standing by; tell them we're still tracking them and back on Spacecraft 7.

CYI He says to tell you we're still tracking you and we're right back on Spacecraft 7.

S/C 7 Okay. First things first.

CYI That's right.

S/C 7 Have they got Tom and Wally out of there yet?

CYI Say again.

S/C 7 Have they got Tom and Wally out of the spacecraft yet?

KRAFT Negative. They're still in but everything is safe.

S/C 7 Okay. Thank you.

CYI Roge.

S/C 7 You probably will catch, Canary. We're venting an ECS 02 now.

CYI Roger. Flight, what is that hydrogen pressure on the ground?

HOUSTON 500. Oh, on the ground? Stand by a moment. 225, Canaries; what do you have?

CYI We're reading 240, so stand by. Seven, Canary.

S/C 7 Go ahead.

CYI Do you still have your heaters on the fuel cell hydrogen?

S/C 7 Negative. They've been off for some time.

CYI Okay. What are you reading up there?

S/C 7 530.

CYI 5-3-0. Okay. Thank you. Turn your quantity read switch off again.

S/C 7 Roger.

This is Houston again. That wrapped up the conversation between Seven and pretty well told the whole story, starting with T minus 90 seconds, on through that very interesting conversation between Alan Bean, who is referred to as Stoney - Alan Bean is an astronaut, and Frank Carey, the Martin Test Conductor in

the block house also was on the loop from time to time. In the spacecraft, primarily Wally Shirra, some from Tom Stafford, also. The flight planners are busy in the back room coming up with new activities for today for the 7 crew, who in just three hours will bypass the Gemini 5 endurance rate in Space, up around 191 hours in orbit. And, we're right now at 187 hours, 54 minutes into the flight of 7. This is Gemini Control, Houston.

END OF TAPE

A recovery helicopter, part of the recovery forces that were airborne at the time at the Cape, a CH3C helicopter with five persons aboard had a small engine fire and made an emergency landing in the Banana River. No one was injured, two of the recovery Larks, those are the large mobile vehicles that are used as part of the recovery forces, have gone to the scene. It is in the vicinity of Launch Pad 37 at Cape Kennedy and are in the process of recovering the pilots and the personnel aboard at the present time. Once again, no one injured, it was a CH3C helicopter, it encountered a small fire in one of its engines and made an emergency landing in the river.

Back at Complex 19 we understand that an inspection crew is on its way to the launch pad to make a quick inspection and an attempt to confirm what data from the blockhouse and the Mission Control Center showed concerning our problem at the pad. This is Gemini Launch Control.

END OF TAPE

This is Gemini Launch Control at the Cape. At this particular point out on Launch Complex 19, some members of the launch crew in specially protective suits are at the base of the launch vehicle making their inspection. They will report back on the status. In the meantime as far as our turnaround is concerned after this engine shutdown this morning, our next attempt, the earliest attempt will be on Thursday which is L+12 days as far as the Gemini 7 mission, or the combined Gemini 7/6 missions are concerned. On that date we will have one launch window. That launch window will begin at 8:43 a.m. EST and last 47 minutes. On the 13th day, L+13 days, from the Gemini 7 launch, that would be next Friday, two windows are available. One starting at 7:14 a.m. EST and the second at 8:49 a.m. EST. The duration of both these windows on that 13th day will be 47 minutes. We will have a press conference at press site No. 2 following egress of the astronauts at Launch Complex 19. The project people will be over to see the press after they are sure that Astronauts Wally Schirra and Tom Stafford are safely egressed from the spacecraft. We're expecting that the erector will be coming up shortly. It may be a matter of 5 or 10 minutes from this time. This is Gemini Launch Control.

END OF TAPE

Haney: Gemini Control, Houston, here. We are 188 hours, 24 minutes into the flight of Gemini 7. Meanwhile, down at the Cape, we are estimating another 20 to 30 minutes before Wally Schirra and Tom Stafford leave 6. Meanwhile, a few minutes ago, as 7 sailed over the Carnarvon station, conversation went like this:

CRO	Gemini 7 Carnarvon
S/C	Go ahead.
CRO	We would like for you to reconfigure to the following positions:
S/C	OK.
CRO	C-band adapter switch to command
S/C	Roger.
CRO	C-band reentry switch to command
S/C	It is at command.
CRO	Standby TM switch off
S/C	Off
CRO	TM switch to command
S/C	It's in command now
CRO	Roger. DCS power circuit breaker switch closed.
S/C	Stand by. Closed
CRO	Real-time transmitter circuit breaker closed.
S/C	Say it again, please
CRO	Real-time transmitter circuit breaker closed.
S/C	It's already closed
CRO	Delayed time transmitter circuit breaker closed
S/C	It's also closed.
CRO	Stand-by power circuit breaker closed.

S/C It's closed.

CRO Command line control circuit breaker closed.

S/C It's closed.

CRO AC AID beacon circuit breaker.

S/C It's closed

CRO C-band beacon circuit breaker closed.

S/C And it's closed

CRO Roger. We have your TM. It's looking good from the ground. Carnarvon has solid TM. Everything looks good.

HOU FLT Roger

CRO He is reconfigured as per your message.

HOU FLT Roger

S/C Carnarvon, this is Gemini 7. We had to go to A pump on the primary loop at 18756 because the pilot was getting warm in his suit.

CRO Roger, copy

HOU FLT Read that

CRO Roger, Flight

HOU FLT Ask him how the temperatures were last night.

CRO Gemini 7, Carnarvon, how were your temperatures last night?

S/C . . . last night.

HOU FLT What did he say?

CRO Repeat, Gemini 7, I did not copy.

S/C They were very good last night, very good.

CRO Roger, copy. C-band track flight. I have some buss readings for you, if you would like them.

S/C Have you heard whether they are definitely going to recycle 6 or not?

CRO We don't have the word yet definitely. The only thing that I heard was the transmission to you over the Canaries.

S/C Roger

HOU FLT We don't know yet, Carnarvon. We are not sure yet what they are going to do. Tell him we'll keep them informed as soon as we know.

CRO OK, we've just been advised that they don't know what they are going to do and they will keep you advised when they determine.

S/C Roger.

CRO Flight, Carnarvon

HOU FLT Go ahead

CRO OK, I've got the main buss currents. Main buss current No. one, 11.3; Main buss two current, 7.89; stack 2-A, 1.26; 2-B, 2.43; 2-C, 4.20

HOU FLT Jack, copy

*Includes air/ground over Kano on Rev 118, no commentary.

Cap Com Roger Frank. We would like to give you a Flight Plan update.

S/C Roger, stand by. Go.

Cap Com S-5, 188 55 22, sequence 12, mode 02, pitch 30 degrees down yaw 3 degrees right. Did you copy, Frank.

S/C Roger.

Cap Com Gemini 7, Houston.

S/C Go ahead Houston.

Cap Com We would like you to close the DCS circuit breaker, the acq aid circuit breaker and the real time TM circuit breaker.

S/C Roger. That's done.

Cap Com Let me give you another flight plan update item here. Time 188 00 00, bio-med recorder number 1 on. Off at 190 00 00 do you copy.

S/C Roger.

Cap Com That is all the flight plan update we will give you at this time. There is a possibility of an MSC-4 or an S-8/D-13 on the next U. S. pass.

S/C Roger, Elliot, thank you. Keep us posted.

Cap Com We will keep you posted.

S/C Tell Tom and Wally we will still be waiting the 12th day if they can make it.

Cap Com Okay, Frank. It is -- it is two U.S. passes from now that we have a possible activity for you. We will be letting you know.

S/C Very well.

Cap Com Can we have the section 2 stack readouts while we are at it.

S/C Roger, will do. Stack 2A is reading about $2\frac{1}{2}$ amps, 2B is reading 2, and 2C is reading 4.

Cap Com Roger, Jim.

END OF TAPE

CAPE Launch Complex 19 is now being raised back to its position enclosing the launch vehicle. As soon as the erector is fixed in place the Gemini 6 pilots, Wally Schirra and Tom Stafford, will leave the spacecraft. We are still on minimum conditions at Launch Complex 19, that is, we have a small crew near the Pad making an assessment of our situation. A minimum crew will also be permitted to go up in the White Room once the erector is in place to assist the astronauts on departing from the spacecraft. We expect that Schirra and Stafford should be out some 10 to 15 minutes from now. We will now switch to the Mission Control Center in Houston.

MCC This is Houston. The spacecraft is directly over Houston right now and the crew has just performed another fuel cell purge. Everything looks fine aboard Gemini 7, and let's stand by to see if we can get some conversation from 7.

CAP COM They're in the process of raising the erector at the Cape at this time.

S/C Thank you.

S/C We noticed that the purge really raised the QA up.

FLIGHT Very good.

S/C Purge complete.

TEXAS Gemini 7, Texas Cap Com.

S/C Go ahead.

TEXAS I'd like to get a purge and quantity readout at this time. Would you place your readout switch to the ECS O_2 position?

S/C Roger. ECS O_2.

.....

TEXAS Roger. Ready to go, test fuel cell O_2.

S/C Fuel cell O_2.

TEXAS Fuel cell H_2.

S/C Rog.

TEXAS Roger. You can place the quantity switch to the off position, and we're standing by.

S/C Roger.

HOUSTON Texas, we're going five for voice.
Gemini 7, Houston.

S/C Go ahead, Houston.

HOUSTON We haye a flight plan update when you're ready to copy.

S/C Go ahead, Houston.

HOUSTON MSC-4 190 27 00, sequence 01, mode 01, pitch 26 degrees down, yaw 34 degrees left. On this one we want you to minimize your fuel, if you don't acquire it, then give it up. We're trying to minimize fuel and this is a White Sands pass; however, it is a very good White Sands pass. It'll be about the closest one we've had and the weather there is clear.

S/C Roger, understand. Have they fixed the boresight? Over.

HOUSTON Supposedly they have and they're ready to go.

S/C Thank you.

HOUSTON OK, next item. 190 40 00, exercise, 190 50 00 you have a TX coming up. Did you copy, 7?

S/C Roger. ....

HOUSTON OK. Heat period, MSC-2 and 3, 190 50 00, sequence 02, same time as the start of heat period. Apollo 192 12 06, sequence 70, mode 01, time 193 23 00. Crew status report from the Command Pilot at Hawaii. Do you copy?

S/C Roger.

HOUSTON Did you ever get the TX?

S/C Negative.

HOUSTON About 30 seconds more. Continuing with the flight

plan update. 193 35 00 purge fuel cells at Guaymas. 193 56 00 crew status report on the pilot at RKV. TX transmitted, do you receive?

S/C Roger, got it.

HOUSTON OK. 194 41 00 flight plan report at CSQ. 194 59 00 PLA update at Hawaii. 196 17 00 fuel cell purge CSQ and bio-med recorder No. 2 continuous. Do you copy?

S/C Roger, I copy.

Elliot, I'd like to ask a question.

CAP COM Go ahead.

S/C Do you read, Houston?

CAP COM Go ahead.

S/C Since we're going to be drifting a lot, we'd like to go ahead and take more target opportunity photographs because it's almost impossible to program anything else. We've got a lot of film we haven't used yet.

CAP COM Roger. We intend to give you a lot of different kinds of assignments that you might be able to pick up in drifting flight and feel free to pick any of them up in drifting flight that you can.

S/C OK, what I'm saying is that if we see anything

interesting down there I'd like to go ahead and take some pictures of it. We've been briefed by the weather and terrain people because if we're drifting you just can't program anything else.

CAP COM Roger. I'm observing the White Room. They have the erector up. They have the White Room up. They're presently taking Wally and Tom out of the spacecraft.

S/C Very good.

MCC This is Gemini Control Houston. You have heard complete report and updates by Elliot See to the 7 spacecraft. The reference to MSC-4, of course, is a laser experiment that will be attempted on the next revolution over White Sands. This is Gemini Control Houston.

END OF TAPE

CAP COM Hawaii, give us a main, an A and a B, please.

HAWAII Roger, main, A and B.

CAP COM Roger. Space 7, Houston, how do you read?

S/C OK.

CAP COM Still don't have any definite word from the Cape yet, 7. We're going to be extremely careful with our fuel. Continue to be so. And we're going to give you some experiments today but we want you to be extremely stingy on the fuel. We will try to minimize the fuel using type experiments but we will give you some which you can try to pick up in drifting flight with very minimum fuel usage. We're presently planning an MSC-4 on the next rev at White Sands. We'll be giving you an update on that later.

S/C Roger. Understand.

CAP COM We were wondering if you saw the ignition at the Cape.

S/C Roger. The gantry was open when we were over it and we were in fine position for photography, but we never saw the ignition. We were waiting for the rise.

CAP COM Roger. Apparently it was on and off very quickly.

CAP COM We'll be keeping you informed on that as soon as we get some more. Got anymore water boiling venting.

S/C Not to my knowledge any.

CAP COM Roger.

HAWAII Making a C-Band check. Hawaii is TM solid.

CAP COM Roger, Hawaii.

FLIGHT Hawaii Cap Com, Houston Flight.

HAWAII Houston Flight, Hawaii Cap Com.

FLIGHT We'd be interested in knowing if you got any moments on the spacecraft when the ECS O_2 vented and we also would like to know if he marked the time on the ECS O_2 venting.

HAWAII Roger. Gemini 7, Hawaii Cap Com.

S/C Roger, Hawaii, Gemini 7.

HAWAII Roger, we show you go on the ground and we have a question for you when you're ready.

S/C Go ahead.

HAWAII Roger, we'd like to know if you had any moments when the ECS O_2 vented, and if you noticed the time?

S/C Negative. We did not notice any particular moments or gyration of the spacecraft and we do not know the time.

HAWAII Roger. Understand. Standing by.

Flight, this is Hawaii Cap Com, did you copy?

FLIGHT Affirmative. You might tell him that -- no, don't tell him that, forget it.

HAWAII Roger. Hawaii.

AFD AFD, Hawaii, go ahead.

HAWAII Give me a T_R time hack.

AFD OK. Stand by one.

HAWAII I'll give you one. 463045 on my mark.

AFD Roger. You're right on.

HAWAII Is that 46 or 22?

AFD That's 4630.

HAWAII Thanks, Carnarvon. Flight, Hawaii Cap Com.

FLIGHT Go ahead, Hawaii.

HAWAII Our C-Band beacon looks real bad. We're having intermittance on it.

FLIGHT Well, you've got a real low elevation current there.

HAWAII Again?

FLIGHT You've got a low elevation pass there, don't you?

HAWAII It should check better than that, Flight. It's either from the attitudes or the beacon is breaking up. We check real good on the C-Band. Telemetry is real solid. The C-Band should be solid at this time.

LIGHT We've got a max elevation of 5.7 degrees.

HAWAII We've been checking real good at that elevation.

I'm talking as far as holding locks.

FLIGHT Rog.

HAWAII Hawaii has lost C-Band track.

FLIGHT Say again.

HAWAII Hawaii has lost C-Band track.

FLIGHT Rog.

HAWAII Back in again.

FLIGHT Say again.

HAWAII C-Band track again at Hawaii.

FLIGHT Rog.

HAWAII Hawaii has C-Band TM LOS.

FLIGHT Roger.

END OF TAPE

This is Gemini Launch Control at the Cape. Wally Schirra and Tom Stafford are now out of the Gemini 6 spacecraft. They were helped over the hatch at 33 minutes past the hour. It is expected that shortly after they go down the elevator, they will get back to the crew quarters as soon as possible. We are still looking over our condition at Launch Complex 19. We expect that we will be able to start a news conference some 30 to 40 minutes from this time. This is Gemini Launch Control.

END OF TAPE

Gemini Control Houston, here. 189 hours and 18 minutes into the flight of 7. Chris Kraft, in the last few minutes, suggested somewhat, more than somewhat facetiously that perhaps Wally Schirra and Tom Stafford didn't like the seven orbit for a rendezvous attempt indicating maybe the 161 circular would be more to their liking than 161.5 in which seven is right now. This message was conveyed up to seven over Ascension. And Frank Borman and Jim Lovell joined right in the fun. The conversation went like this.

HOU Gemini 7, Houston, how do you read?

S/C Roger, Houston, loud and clear.

HOU Roger, we presume that Wally and Tom were unhappy with your orbit. They're waiting on a 161 circular.

S/C .....(garble).....

HOU I beg your pardon.

S/C We will program our venting so we can push the orbit up to .....

HOU Roger, would you like your present orbit.

S/C What is that?

HOU Would you like to know what your present orbit is? Gemini 7, have we given you your present orbit?

S/C .....our present orbit?

HOU Roger. It is 161-5 circular.

S/C Roger that is a little high for Wally and Tom I agree. In three or four days we should be on our target.

HOU Very good, 7, we'll give them your message.

END OF TAPE

Haney: This is Gemini Control, Houston at 189 hours, 39 minutes into the flight of 7. For your reference, the flight of Gemini 5, the record that shortly will be surpassed, was 190 hours, 56 minutes; and Cris Kraft says we plan to give 7 a special salute when they pass that point. Also, for your information, the Project officials here at Houston, and also at the Cape, are still huddling, and we expect that news conference at the Cape to start perhaps 15 or 20 minutes from now. Meanwhile, some information on city passes. The 7 spacecraft should be viewable from these cities at these local times, all times local: We have a date for Los Angeles on December 13, 6:52 a.m. Pacific Standard; on the 15th of December, 5:29 a.m.; on the 16th, 5:34; on the 17th, 5:40 a.m.; on the 18th, 5:46 a.m. El Paso should be able to see the spacecraft on the 13th at 6:19 a.m.; on the 14th at 6:35, and on the 15th at 6:31 a.m., local El Paso time; on the 16th 6:37; on the 17th, two chances, 5:08 a.m. and 6:43 a.m., and on the 18th two chances, 5:13 a.m. and 6:49 a.m. Houston should be able to see it on the 13th at 7:15 a.m.; on the 14th at 5:52 a.m.; on the 15th, 5:58; on the 16th, 6:04; on the 17th, 6:10 a.m.; and on the 18th, 6:15 a.m. The Cape area should be able to see the spacecraft on the 13th of December at 6:48 a.m., EST; on the 14th at 5:30 a.m.; also on the 14th, 6:54 a.m.; on the 15th, two chances, 5:26 a.m. and 7 a.m.; on the 16th, 5:32 a.m. and 7:07 a.m.; on the 17th, 5:37 a.m.; and on the 18th, 5:43 a.m. This is Gemini Control Houston. We are coming up on Carnarvon in perhaps 5 minutes on the 119 round.

END OF TAPE

This is Gemini Control Houston, 190 hours 42 minutes into the flight. Over White Sands on this last pass across the States the crew tried to acquire that Laser beam without very much luck. Frank Borman said he saw two very brief pulses from the ground. Jim Lovell apparently did not see the ground beam at all, however, Jim did, at point of closest approach go ahead and transmit his 100 pulse-per-second beam to the ground. We do not know yet whether the ground received it. Apparently no luck which was Borman's wrapup commentary on that experiment. Later in the pass Elliot See passed up to them today's news and on hearing it, Jim Lovell made a special request that we try to read them Little Orphan Annie. He said Borman missed it a lot and Chris Kraft, apparently who is a Little Orphan Annie fan, passed along a briefing on that item. Here is the tape now as 7 crossed the United States.

Cap Com — Gemini 7, Houston.

S/C — Go ahead Houston.

Cap Com — The Laser site is marked the same it was the last time you tried it. We have two grey smoke pots which are 10 miles north of the Laser site. The smoke pots are 30 miles apart east and west of each other. The weather report there is clear and wind calm. Do you copy.

S/C — Roger. We have White Sands in site now Elliot, coming up on it, it is a....

Cap Com — Say again 7.

S/C — I said we have White Sands in site. It is a long way off. The Rio Grande stands out very clear today.

Cap Com — Roger.

S/C — I can even see my old home town of Tucson Arizona down there.

Cap Com Roger, very good. Tucson.

S/C Got the periscope on it now. We got a very good picture of the site, but we still don't have the Laser.

Cap Com Roger.

S/C I got two blinks on the Laser, Elliot, but it is not coming in loud and clear.

Cap Com Roger, understand. You saw two pulses from the ground station and that was all.

S/C Right. We are still going by, as a matter of fact, we are at closest approach now.

Cap Com Roger.

S/C I guess I'll have to report no luck, Elliot.

Cap Com Roger, we copy. Are you complete at your attempt.

S/C Please keep tracking to get a (garbled) the gear down there isn't transmitting.

Cap Cap You say he is trying to transmit, or he is just using the 100 pulse beam.

S/C No, he used the 100 pulse beam all right at the closest approach, but I'm afraid we didn't -- unfortunately he didn't acquire the Laser. I saw it twice.

Cap Com Roger. You saw the two pulses and that is all.

S/C That is affirmative.

Cap Com And you say he never actually saw the beam for sure.

S/C That's Right.

Cap Com Roger. We have a flight plan update for you when you are

ready to copy and finished with the tracking.

S/C Bring it in , Elliot.

Cap Com Okay, you got a TX coming up here pretty soon.

S/C Thank you.

Cap Com Okay, flight plan update. Apollo 192 12 06, sequence 70, mode 01, pitch 30 degrees down, yaw 13 degrees left. MSC-2 and 3, time 206 42 00, off at that time, MSC-2 and 3 off, time 206 42 00, fuel cell purge at Antigua and the same time bio-med recorder off. Do you copy.

S/C Roger.

S/C Gemini 7.

Cap Com Go ahead Gemini 7.

S/C You might inform the experimenters on MSC-4 that the green filter for daylight acquisition is completely useless because it is impossible to recognize any of the terrain around the light.

Cap Com Roger. Understand. The green filter blocks out or filters so much that it causes you to lose terrain definition around the light, trying to locate the Laser light.

S/C Affirmative. It might be good at night but not in the daytime.

Cap Com Roger 7. We will work on that. We may be able to operate without it.

S/C Got any news Elliot.

Cap Com Roger, I've got that for you now. You ready.

S/C Ah.

Cap Com News is eminent. Would you like the local news meanwhile.

S/C How did things come out on 6, any word on that?

Cap Com No, really nothing further. We were watching the press con ference here a minute ago and they have not set a definite

time on the recycling that I could hear. They are estimating on an announcement about 4 or 5 o'clock this afternoon as to the recycle time.

S/C Roger.

Cap Com It appears that it was strictly a faulty indication, an electrical plug dropped out or fell out, came out at the bottom starting a lift-off sequence but we had actually not lifted off yet and it caused the whole kill, so it is just a question now of a recycle time.

S/C Roger.

Cap Com I've got some regular news for you here if you are ready.

S/C We are ready.

Cap Com Mr Haney's news service says that mostly sports and Gemini news in the papers this morning. Texas A and M has been put on probation for some of its athletic practices and he adds that is not just another Aggie joke. Oklahoma University has offered Darrell Royal the head coaching job there and he says he is willing to talk about it. I think you are pretty well up on the Gemini news.

S/C Roger thank you.

Would you read Little Orphan Annie for Frank. He misses it.

Flight Roger, that -- she is in the bottom of that falls in a ball, and nobody has ever gone over the falls in a ball and lived before.

S/C It has me worried.

Flight Tell him the Flight Director is worried about it too. We will keep him informed.

Cap Com Gemini 7, Houston. You can turn on HF now if you are interested.

S/C Thank you.

S/C Elliot, how are our fuel cells looking?

Cap Com Looking very good at the present time. We are learning something every day on them. I'm sure you are too.

S/C Okay. Gemini 7.

Cap Com Go ahead.

S/C For your information, our window problem hasn't been solved yet. We still have deposits on our windows and we are not too sure whether it was caused during the SECO, or staging, or caused by the urine dump on my side or whether it is on the inside of the outer pane.

Cap Com Roger. I understand. This is on both windows or primarily on your window.

S/C I believe I have the heavier coating although Frank has some, but it looks like little grease spots, with greasy little spots.

Cap Com Roger, understand. Looks like grease spots.

S/C Rog.

Cap Com Or you hit a few bugs.

S/C Roger.

Cap Com Flight says they must be fireflies.

S/C Probably a boilers effect.

Cap Com Roger that.

S/C We can pick up White Sands over the lower coast of California.

Cap Com Roger Frank. We understood Dr. Seamans issued a special statment this morning commenting on the Gemini 7/6 mission reflecting favorably on the planning of it and the

contingency operations and specifically citing out Wally and Tom for their correct analysis and cool planning under the circumstances there by not ejecting at the hold-kill.

S/C Right, that was good work. I hope they can recycle it.

Cap Com 7, we are waiting on that.

END OF TAPE

190 hours, 58 minutes into the flight of 7, and we have a bulletin for you. About 2 minutes ago, 7 exceeded the Gemini 5 endurance record in space. That record exactly was 190 hours, 55 minutes and 14 seconds. Precisely at that time, Elliot See was talking with 7 via Ascension Island and he advised them that they had indeed exceeded the record of 5 and as a little bonus he advised that they were free to adopt any suit configuration they chose. Obviously, suggesting that both could take off their suits at this time if they liked. The answer came back, a very boisterous one from Jim Lovell. It was one word, "Hallelujah!" About 30 seconds later Elliot asked Jim if he was out of his suit yet and he said he only had one leg to go. Obviously, in jest. The general plan is to leave the two running without the suits up to the rendezvous maneuver with 6 or at least until well after 6 liftoff some four days from now. We have this tape of the Ascension pass in which they exceeded the Gemini 5 record and here is that conversation.

CAP COM Gemini 7, Houston, how do you read?

S/C Read you, Houston.

CAP COM We have a brief flight plan update for you when you're ready to copy.

S/C .....

CAP COM Node 191 34 45, rev 120, 14.6 degrees east, right Ascension 95221, do you copy?

S/C Understand node 191 30 45, rev 120, 14.6 degrees east, what is the rest again, please?

CAP COM Roger. Right Ascension 95221, and your time was incorrect, it is 191 34 45. Do you copy?

S/C Roger. 191 34 45. And I have right Ascension.

CAP COM Roger, 7. Gemini 7, Gemini 7, Houston, do you still read us?

S/C Roger, Houston.

CAP COM Roger. Sorry to disturb your lunch but we have a message here we think you'd be interested in.

S/C Roger, go ahead.

CAP COM We're coming up on a special time here, about 5 seconds. Mark, here. Just exceeded the world's manned space flight endurance record and by sheer coincidence we are pleased to inform you that you are cleared to choose whatever suit configuration you would like. Keep us informed.

S/C Hallelujah. Mine's coming off....

CAP COM We copy. You out of that suit yet, Jim?

S/C Roger. One leg to go.

END OF TAPE

This is Houston at 191 hours, 55 minutes into the flight. At Carnarvon last time, we had no discussion with the ground. Everything was going along fine, so they just passed over without a word. At Hawaii, there was brief conversation. For one thing, Jim Lovell was admonished to drink more water. Dr. Berry says that his water intake is down from what it should be. Here's the conversation as 7 went over Hawaii.

HAW We have TM solid.

HOUSTON Roger, Hawaii.

HAW Okay. The spacecraft told negative pilot data. He must still be getting out of the suit.

HOUSTON Roger.

HAW Gemini 7, Hawaii Cap Com. We have nothing further for you. We'll be standing by.

S/C How's the weather down there, Hawaii?

HAW Real fine today. Beautiful.

S/C I wonder if we can get an MSC pass on later today.

HAW Well, we went through that a little earlier, but...Stand by. Hang loose here.

S/C Okay. We'd sure like to.

HAW Did you copy all that?

HOUSTON Yea. We copy that. Stand by.

S/C Hawaii, for your information, Jim is now out of the suit, being that the suit's off configuration.

HAW Roger.

HOUSTON It doesn't look like it's possible today there, Hawaii. Tell him we'll take another look at it, but it doesn't look like it is.

HAW Okay, Flight. They say it doesn't look like it's going to be possible to get one here today. Probably tomorrow, but they'll take a further look at it.

S/C Thank you.

HAW Okay. We're now getting good bio-med data from Jim. It looks like he's pretty well hooked back up again.

S/C Roger.

HOUSTON Hawaii, Cap Com, Houston Flight.

HAW Houston Flight, Hawaii Cap Com.

HOUSTON Seven to three Green Bay over Baltimore in the first quarter; they'll want to know that.

HAW Say again. Say again, Flight.

HOUSTON Seven to three, Green Bay over Baltimore. Were they listening?

HAW I got that. I was cut out by somebody else. Receiving HF up there?

S/C There's been a lot of static today for some time. I just turned it on.

HAW Okay. It's 7 to 3, Green Bay at the end of the first quarter.

S/C Very good.

HOUSTON In the first quarter.

HAW That is in the first quarter.

HOUSTON They can copy if they listen hard enough.

HAW They say they're getting a lot of static.

S/C Maybe it'll get better as we get closer to the States.

HAW Roger. How are your Oilers doing, Flight?

HOUSTON They haven't started yet.

HAW That means they haven't lost yet.

HOUSTON Adams is not going to like you.

HAW Say again.

HOUSTON Bud Adams is not going to like you.

S/C Negative .....(garble)...not transmitting.

HAW Okay.

HOUSTON Hawaii, Houston Flight.

HAW Houston Flight, Hawaii.

HOUSTON You can tell him that the Flight Surgeon in the Control Center is going to get on to the pilot about not drinking water so maybe he'd better drink some between Hawaii and here.

HAW Okay. Seven, does your pilot there like water?

S/C Roger. He's drinking it.

HAW Well, he'd better keep drinking, because if he doesn't get some into him by the time he gets to the States, he's going to have the Flight Surgeon on his back.

S/C Okay. We'll put some more in him right now.

HAW Roger. Flight, we're showing 2C as 4.08 amps.

HOUSTON Roger. Hawaii, go to volt UHF. What do you show on 2B?

HAW Hawaii contact's remote. Hawaii remote.

HOUSTON Gemini 7, Houston Cap Com.

HAW Say again Houston.

HOUSTON Gemini 7, Houston.

S/C Loud and clear, Houston.

HOUSTON Right. Did you acquire the Laser sight on that pass?

S/C No. We're just drifting.

HOUSTON Okay. It doesn't look like you'll have a pass that'll take you much closer than that until in your safe cycle, except for perhaps the 122nd; and we'll look into rescheduling one for you

just to look at and see if you can acquire the beam and perhaps not use any fuel.

S/C Fine. Thank you.

HOUSTON Okay.

HAW Houston, Hawaii. Correction - that's 3.61 amps on that 2C.

Houston here. As you might have concluded from that broadcast, we are beaming by HF up to 7 the Green Bay, Baltimore football game through the courtesy of CBS. This is Gemini Control at 192 hours into the mission.

END OF TAPE

Gemini Control Houston here. We've just started the 121st revolution around the earth on 7. Over the States this last time the conversation went like this.

S/C All right, ground.

CAP COM 13 to 3 and they're ready to kick another extra point.

S/C Roger.

GYM Guaymas has solid TM and all systems are go.

CAP COM Roger, Guaymas.

GYM Gemini 7, Guaymas Cap Com. Everything looks good here on the ground.

S/C Roger.

GYM And, by the way, it's now Green Bay 14 to 3.

S/C Excellent.

TEXAS Texas has TM solid and all systems go.

FLIGHT Roger, Texas.

TEXAS Gemini 7, this is Texas Cap Com.

S/C Go ahead, Texas.

TEXAS We're sending you a TX.

S/C I got it.

TEXAS You're going...., standing by.

S/C Thank you.

AFD This is AFD.

TEXAS This is Texas, go ahead.

AFD We're going five for voice.

TEXAS Roger.

CAP COM Gemini 7, Houston.

S/C Go ahead, Houston.

CAP COM You receiving the HF OK?

S/C A little garbled but OK.

CAP COM You want to keep it going or you want to go back to the other.

S/C We'll keep it.

CAP COM OK. Stand by for the Surgeon.

SURGEON Jim, we're interested in checking on this lead and it looks like you've got a very good sternal. Did you replace the sensor already?

S/C No, I think that probably happened when I was taking off the suit.

SURGEON Well, gee, it looks very, very good now so let's leave it alone for awhile and see what happens. If it deteriorates again, what we'd like for you to do is just remove the tape and clean the sensor out and start all over with new paste and the new Stromaseal tape and then new tape over it, so we'll start off fresh. It should be that lower sensor, Jim.

S/C Roger. The lower sensor. Will do.

SURGEON The lead looks fine now. And your water intake is way down, Jim. We'd like for you to keep at it and are you having any thirst at all. Do you feel that you ought to be taking more water?

S/C No, I'm perfectly happy with the water intake. Of course, I've just taken about 13 to 14 ounces of water here in the last hour.

SURGEON Rog. OK. Let's keep at it and we'll keep an eye on it and keep you posted.

S/C Still about 550 .....

SURGEON Very good. Are you a little more comfortable now?

S/C Much better. This is really great. If you happen to see ...., you might tell him that this is the only way to fly.

CAP COM Roger. We copy that, Gemini 7.

SURGEON Think we've got 14 days made this way, huh?

S/C Just about. ....going to get too tired.

SURGEON We'll try and hold up. You just do the same.

S/C We are the Red and White Team up here.

SURGEON Well, we're all blue down here.

FLIGHT Many days like this one, we're going to get tired.

S/C Let us know about the recycle as soon as you know, will you, please, Chris?

FLIGHT Rog. They're talking Wednesday at the moment but nothing final yet.

S/C Very good.

ANTIGUA .....,Antigua.

END OF TAPE

This is Houston at 192 hours, 34 minutes into the flight. Jim Lovell said the viewing was excellent today as they came down the northeast coast of South America on that last pass over that continent. The spacecraft now in the South Atlantic, nearing the tip of Africa. Here's the tape discussion he had with the Rose Knot Victor.

RKV Gemini 7, RKV Cap Com. We have nothing for you this pass. We're standing by.

S/C This is Seven, roger. We've had one of the best pictures of all. We saw the ...uh...(Garble).

RKV Get a good view?

S/C We got a fine view.

RKV All systems look good, Flight.

HOUSTON Roge. The cell is really hanging in there now for us, RKV.

RKV Yes. What's the explanation for 2C's performance?

HOUSTON No explanation. We've just been waving wands down here on the Earth. And we purged it over Texas to quote the White Flight.

S/C RKV, Seven.

RKV Alright. Go ahead 7.

S/C What's the closest point you're anchored to?

RKV That would be Rio. We're 35 miles off the coast, and I guess we're about 150 miles north of Rio.

S/C Roger. Thank you.

RKV That's 350 miles north of Rio. You'll be able to see a river south of us.

S/C We'll look at you the next pass.

RKV Roge.

HOUSTON RKV, would you send us another main, please?

RKV Roger. We powered down the Acq-Aid, Flight

HOUSTON Roger.

RKV RKV has LOS.

HOUSTON Roger, RKV.

END OF TAPE

This is Gemini Control Houston at 192 hours, 47 minutes into the flight of 7. After lengthy discussions with officials at the Cape, it has been determined that we will try for a Wednesday launch, a Wednesday launch of Gemini 6. This would be on the 11th day. We're not absolutely certain we can make that but we think it is possible. The workers estimate that they can turn the booster around and the spacecraft around in that amount of time, and we are currently working toward that goal. Our two windows on Wednesday are as follows: 8:37 a.m. EST, that's a full 47 minute window; also, 10:13 a.m. EST, it's a fairly short window only about 7½ minutes. On the 12th day, Thursday, there will be only one window available. It starts at 8:43 a.m. EST. And on the 13th day, Friday, we have two windows available. The first starting at 7:14 a.m. EST, the second at 8:49 a.m. EST. Both are 47 minute windows. I'll say once again that it has been determined that a Wednesday launch is possible. That is our present goal to work toward it, launching on the 11th day. This is Gemini Control Houston.

END OF TAPE

Houston here at 192 hours 54 minutes into the flight of 7. A minute or two ago over Tananarive, Elliot See advises the crew that we are going to try for a Wednesday launch of 6. Here is how that sounded.

Cap Com — Gemini 7, Houston. How do you read.

S/C — Loud and clear.

Cap Com — Tremendous communications. We have the word that they are going to attempt to launch 6 in 3 days and if they don't make it then, of course, they will just go to the next day. The launch time on the third day, which will be Wednesday, is 8:37 eastern standard time.

S/C — Roger, we are wishing for all the luck in the world on the Gemini 7, the friendly target vehicle will be standing by.

Cap Com — Roger, and from now till then we are planning a level of experiments for about 3.4 pounds propellant per day versus an average of about 6 pounds per day that we have been scheduling for you.

S/C — Okay.

Cap Com — And we will make every attempt to schedule as many of the minimal fuel user type passes as we can.

S/C — Roger, we are conservative as usual.

Cap Com — Roger, and we have a progress report on the football game. It's San Diego 7, Houston 0.

S/C — Roger.

Cap Com — Roger. Are you receiving the HF all right down there.

S/C — We were, could you hold on a second, we turned it off, we are going to give it a try right now.

Cap Com — Roger. We are going to try sending it out of California on your Pacific pass so you may get it a little better from now on.

S/C	Houston, can you still read us?
Cap Com	Roger.
S/C	Our HF is green here.
Cap Com	The HF? Say again Gemini 7.
Tananarive	Tananarive has LOS.

END OF TAPE

*Occurred during Rev. 121 over Coastal Sentry Quebec, air to ground (no commentary)

HOU FLT CSQ Cap Com on a com check, how do you read?

CSQ Cap Com, loud and clear

HOU FLT Roger, you also

CSQ CSQ has TM solid

HOU FLT Roger that, CSQ

CSQ All systems are go

HOU FLT Roger

CSQ Gemini 7, CSQ Cap Com. We have you GO on all systems. We have nothing to pass to you. Standing by.

S/C Thank you, CSQ. See you later on tonight.

CSQ Roger

HOU FLT CSQ Cap Com, ask him how the HF is. They're over California at the moment. We're wondering.

CSQ Roger. Gemini 7, CSQ. We're reading you HF over California at this time. Do you copy HF?

S/C Roger

CSQ ... have LOS, Flight

HOU FLT Roger

CSQ We got a "Roger" from him on that HF reception.

HOU FLT Roger. How are you feeling out there, Chuck?

CSQ Oh, a little tired. Kinda rough last night, didn't get much sleep.

HOU FLT That's what I understand. Any better now?

CSQ It seems to be smoothing out a little bit. If it will just hold off until tonight, we'll be in good shape tomorrow.

HOU FLT Hope so. Get some rest.

CSQ All systems are GO at LOS, Flight

HOU FLT Roger

END OF TAPE

This is Gemini Control. We are now 193 hours and 33 minutes into the flight of spacecraft Gemini 7. At the present time our spacecraft is passing over the Pacific, and very shortly we will come upon the Guaymas, Mexico tracking station. In here in the Control Center we are in the midst of a shift change. The Red Team will be leaving here momentarily. The White Team has already taken over the consoles. At this time we will play back the taped voice conversation between the spacecraft and the Hawaiian tracking station.

HAWAII Hawaii is TM solid.

HOUSTON Roger, Hawaii.

HAWAII Gemini 7, Hawaii Cap Com.

S/C Gemini 7, go ahead.

HAWAII Roger, we have a good temperature, standing by for your blood pressure.

S/C Roger, coming down shortly. Testing full scale.

HAWAII Have a good blood pressure, standing by for your exercise.

S/C Roger. Pressure?

HAWAII Pressure is full scale. Have a good blood pressure, standing by for your food and water report.

S/C Roger. Coming down. Pilot to date has had 560 ounces of water. Column 5 is 20, column 6 is 3. The last meal was day 11th, meal B. Did not eat

the apricot cubes. The pilot had 651 ounces of of water. B meal, ate every bite. Column 5, 21, column 6, 5.

HAWAII Roger, Gemini 7. Have nothing further for you at this time, standing by.

S/C Roger.

HAWAII Tape dump completed at Hawaii.

FLIGHT Rog. We copy.

HAWAII Affirm. Be happy to note that the pilot has had three, 3.72 pounds since this mornings report.

FLIGHT Say again, please.

HAWAII ...this is Hawaii Cap Com.

FLIGHT Go ahead, Hawaii.

HAWAII Were you calling us?

FLIGHT Roger. The Surgeon has an open mike.

HAWAII TM LOS.

That was the taped voice communication between Jim Lovell, our pilot in spacecraft Gemini 7, and the Hawaiian tracking station. We are now 193 hours, 36 minutes into our mission and our spacecraft very shortly will be within the tracking station near Guaymas, Mexico and the State-side pass. This is Gemini Control.

END OF TAPE

This is Gemini Control, we are now 195 hours and 6 minutes into our mission.with the spacecraft over the Pacific Ocean on the 122nd revolution and heading toward the West Coast of South America. At this time we will play back the taped voice communication that has been compiled during the last 80 minutes as the spacecraft passed over the Guaymas tracking station, the Rose Knot, and the Hawaiian tracking stations.

Cap Com — Gemini 7, Gemini 7, this is Houston Cap Com, over.

Gemini 7, Gemini 7, Houston Cap Com, over.

S/C — Houston, this is Gemini 7.

Cap Com — Frank, the ball game may have been interrupted slightly. We went from our California transmitter to Canaveral transmitter.

S/C — What's new Houston. Anything? Gemini 7.

Cap Com — Roger Gemini 7, reading you loud and clear. We have nothing new right now. We are still looking forward to Wednesday.

S/C — Okay, so are we.

Cap Com — I think there are two other guys who are too.

S/C — As a matter of fact, we are almost beginning to look forward to Saturday.

Cap Com — You getting itchy? Gemini 7, Houston. Are you receiving your HF now from the Cape.

S/C — Roger, very good.

Cap Com — Okay.

Flight — RKV Cap Com, Houston Flight.

RKV — Go Flight, RKV.

Flight — Roger, we are standing by for your acquisition.

RKV — Roger, did you send me another one?

Flight — Roger, it is a CSR on the Pilot, Bill. We sent it to you.

RKV — ... (garbled)

light	Daytime group is 21 15.
RKV	That is his CSR, right?
Flight	Yes.
RKV	Okay. We got a readout on 1 Charlie.
Flight	Roger RKV.
RKV	Transmitter to TX, all systems are go.
Flight	Roger RKV.
S/C	Gemini 7.
RKV	All right Gemini 7, RKV Cap Com. We copy your oral temp, standing by for blood pressure.
S/C	... (garble) blood pressure.
RKV	We didn't get full scale, Gemini.
S/C	Okay.
KV	Pump it just a little bit higher, Jim. Real fine we have it.
S/C	Gemini 7, RKV Surgeon, we have a good blood pressure. Give me a mark when you begin exercise.
S/C	MARK.
RKV	Full scale. We have a good blood pressure Gemini. Has there been any change in your food and water report since Hawaii.
S/C	Negative.
RKV	Roger. Surgeon out.
RKV	RKV, Flight.
Flight	Go ahead.
RKV	The 2 Charlie is really carrying a load now.
Flight	What are you reading.
KV	We figure 2.6 amps.

'light Stand by and we will give you a little comparison.

Roger, we confirm about 3.5.

RKV Roger, looks real good Flight.

Flight Roger. How is it looking RKV.

RKV Looking real good Flight.

Flight Good.

RKV RKV.

Flight Go ahead.

RKV What do you attribute 2C performance to.

Flight Say again.

RKV What do you attribute 2C's performance to.

Flight Science and Technology.

RKV ...(garbled)...

ight I really don't know, Bill.

RKV RKV has LOS, All systems go.

Flight Roger RKV.

Flight I can appreciate the humor on that section 2, Bill. Considering the flop and all the diverse opinions we got, particularly the ones that recommended do nothing.

RKV Evidentily there's a lot of activity back there.

Flight ... LOS.

RKV There you go.

Flight Okay, we'll crank up a good systems briefing, Bill and we will also go through this large window plot we've got here and give you the lift-off times for probably the 11th, 12th, 13th days. We will send you up the times so you can more or less sketch in where the (garbled)... We'll give them to you in G.m.t., or g.e.t's.

RKV We've only got one launch window on Wednesday, huh?

Flight No, you've actually got two. You have a real short one. You have two windows Wednesday, 1 Thursday, 2 Friday and 1 Saturday.

RKV I hope we make one of them.

Flight Wilco.

Hawaii Gemini 7, Hawaii Cap Com.

S/C Go ahead, Hawaii.

Hawaii How are you doing. We are showing you go down here.

S/C Say again please Hawaii.

Hawaii How are you doing up there?

S/C Very good.

Hawaii Okay, we are showing you go down here. I've got a landing area update. Let me know when you are ready to copy.

S/C Ready, go ahead please.

Hawaii Okay, area 125-3, 199 05 27, 26-B, 200 42 01, 27-B, 202 30 19, 28-2, 203 14 37, 29-2, 204 48 31, 30-2, 206 24 34, 31-1, 207 53 25, 32-1, 209 28 41, RET of 400K for all these landing areas is 21+40.

S/C Roger Hawaii, thank you.

Hawaii Okay, the weather is good in all areas except 131-1, there it is marginal.

S/C Okay.

Hawaii And there will be a UHF 6 pass at the RKV and also at the CSQ on rev 123.

S/C Thank you.

Hawaii If you have anything else, we will be standing by.

S/C Very good.

That was the taped voice communication between our spacecraft Gemini 7 and the various tracking stations that have accumulated during the past 80 minutes. According to our Flight Plan, the activity for the remainder of the evening will be not much. We have a housekeeping period during which the crew will stow away the equipment they have used during this day. They have an eat period coming up and they will purge the fuel cells and then retire for the night, or at least for our night. We will have, as the spacecraft passes over the Rose Knot on this revolution, which is now 122 but gets over the Rose Know it becomes revolution 123, we will have live communication between the spacecraft and that tracking station and then we'll pick it up again live over the Coastal Sentry on the next revolution. This is Gemini Control, 195 hours and 16 minutes into the flight.

END OF TAPE

This is Gemini Control. We are now 195 hours and 31 minutes into the flight of Spacecraft Gemini 7. At this time, our spacecraft is over South America and is rapidly approaching the east coast. Very shortly it will be over the Rose Knot Victor Tracking Ship. Aboard our spacecraft, our flight crew is in excellent condition; and at this time we have established ground communication.

RKV Flight, RKV Cap Com.

HOUSTON Go ahead, RKV.

RKV All systems are go. We've transmitted TX.

HOUSTON Roger.

RKV Gemini 7, RKV Cap Com.

S/C We read, RKV.

RKV Roger. All systems are go. I have an OAMS status for you whenever you're ready.

/C Roger. We're ready.

RKV Okay. Okay. You have 47 pounds of fuel remaining. This is essentially 26.5% actual. Your gauge should read 24%. We've seen essentially no usage of fuel the last 24 hours. We're planning to use a total of approximately 3 pounds of fuel per day between now and GT-6 lift off. This will leave you the necessary amount for continuances. On E-Com status, as a result of the open circuiting of Station 2 last night, the section came back strong. We believe it was because the water in the cell had time to defuse out. The ECS 02 vented last night, as predicted; and will probably begin tonight again when metabolic consumption decreases. We'd like to leave the quantity read switch at ECS 02 tonight in order to calculate vent rate and to

evaluate the heat leak on the bottle.

S/C Roger. You'll probably notice the fuel cell, now that the water's out of it; is it picking some of the load up again?

RKV It's hard to tell right now, but it looks real good. At least on the curves at any rate.

S/C I'm still wondering why we still have the Delta D on. I guess nobody really knows.

RKV That's a hundred dollar question.

S/C Right.

RKV All your cryo quantities look good for a 15 day plus mission.

S/C Thank you.

RKV Your bed time cryogenic rules for tonight will be ECS O2 heater switch off, your fuel cell O2 heater switch to auto, and your fuel cell H2 - we'd like you to pump it up to five ten PSI, and your minimum for tonight will be four four five. We'd like for you to leave the fuel cell H2 heater off.

S/C Roger.

RKV Okay. We'll update you on the status of the GT-6 launch over CST of this rev.

S/C Thank you.

RKV I've got some ball scores for you.

S/C Hey, you sound different.

RKV In the third quarter LA 28, the Browns 7; Green Bay 42, Baltimore 27 - that's a final score.

S/C ...(Garble)...

RKV We didn't tell you last, but the two previous nights, we had a visual on you over RKV. Had a real good look at you.

S/C With the naked eye or with a telescope?

KV Naked eye. We had about 10 or 15 troops up there.

S/C What do we look like?

RKV You're the fastest guy we've ever seen.

S/C Roger.

RKV Okay. Before we loose you, I'd also like to congratulate you,both of you.for all the flight controls around the world and the way you guys are flying this mission. You're making our job real easy.

S/C Our pleasure, believe us. Thank you.

RKV Flight, RKV.

HOUSTON Go ahead, RKV.

RKV Do you have anything else you want to pass up?

HOUSTON Negative.

RKV All systems look good.

JUSTON Roger. Yea. You could tell them we'll be talking to them over Tananarive, Bill.

RKV Okay. Houston will be giving you a call over Tananarive.

S/C Okay, RKV. We'll see you tonight.

RKV Did you get a look at us on your last pass?

S/C I couldn't find you.

I've got that ..... to look forward to .....

RKV We don't have a wake, that's the problem probably.

S/C Thank you.

RKV Flight, RKV.

HOUSTON Go, RKV

RKV What do you calculate for 2 Charlie this time?

HOUSTON 3.6.

That was based on your first summary, Bill.

RKV Rog.

HOUSTON I'll read 'em down to you, what we've got. We've got 1 Charlie at 24, 2 Charlie at 36.

RKV Flight, RKV.

HOUSTON Go, RKV.

RKV We've got a couple of technicians up on the deck and they've got a spotlight, they're trying - you know - to point it up there and hope they can see it.

HOUSTON You mean - - -

RKV That's what is known as optimism.

HOUSTON The crew can see it or - - - -

RKV No - - - a couple of fellows from the ship have got a light up there, they're trying to point it at the spacecraft.

HOUSTON Roger.
Why don't you dump a couple of thousand gallons of oil out on the water there, and torch it off?

RKV I'd contemplate a lot about that!

HOUSTON Don't get any on you. Stand by on that last, RKV.

RKV Rog.

TEST

RKV Flight, RKV.

HOUSTON Go, RKV.

RKV My spacecraft TR is now 80 by 1.125 seconds which indicates I may have a clock problem here on the site.

HOUSTON Okay.
I'll give you another hack as soon as we finish the pass, Bill.

RKV Okay.

RKV RKV has LOS.

This is Gemini Control. You have just heard live voice communication between spacecraft Gemini 7 and the Rose Knot Tracking Ship. We will again contact the spacecraft through Tananarive. At that time we will pass up to the crew some additional football scores that have been received here. Our next live pass will be very shortly thereafter as the spacecraft comes up over the Coastal Sentry on this 123rd revolution. We are 195 hours and 41 minutes into the flight. This is Gemini Control.

END OF TAPE

This is Gemini Control. We are 196 hours and 3 minutes into the mission of Spacecraft Gemini 7. Our spacecraft at this time is passing over the Indian Ocean on its 123rd revolution around the earth. A few minutes ago we had some voice communication between the Mission Control Center remoting through the Tananarive station and Frank Borman aboard spacecraft Gemini 7. And at this time we will play back the taped voice communication.

Flight — Tananarive go remote.

TAN — Tananarive remote. Tananarive has acquistion.

Flight — Gemini 7, Gemini 7, Houston Cap Com, Over.

S/C — Gemini 7, go ahead.

Flight — Roger, Frank. We'd like to clarify a couple of items on the flight plan report. Did you accomplish all the items? Are we updated today? All the experiments?

S/C — . . garbled . . you already know about, like the Laser.

Flight — Roger, but you did attempt everything that was up there, is that correct? Gemini 7, Houston. Understand you did attempt everything that was up there today.

S/C — Roger.

Flight — Okay. Can you give us an estimate on your D-4/D-7 tape remaining?

S/C — . . garbled . .

Flight — Say again, Gemini 7.

S/C — We have 7 minutes and 40 seconds left.

Flight — Roger. Got 7 plus 40. I've got a node update if you are ready to copy.

S/C We used 30 seconds for GT-6.

Flight Roger, understand you used 30 seconds for GT-6. Gemini 7 I've got a node update when you are ready to copy.

S/C Roger . . garbled . .

Flight Roger, understand.

S/C I'm ready.

Flight Okay. Node at 1990606 ; rev 125;25.3 degrees east; right Ascension 094339.

S/C Gemini 7, Flight. We didn't get all of that could you give us the longitude, latitude . .

Flight Okay. The longitude is 25.3 degrees east.

S/C Roger, right Ascension.

Flight Roger, right Ascension is 094339.

S/C Roger, We copy.

Flight Okay, and we've got somebody here that wants to say a few words to you. Say Big Shorty and Frisby, this is short Biggie. I want to offer you my sincerest congratulations. I can't think of two guys I'd rather see the record go to. And tell Frisby everything okay at home. The prime driver is standing by.

S/C . .garbled . .

Flight Everything is fine on the home front.

S/C We'll see you Pete.

Flight Roger. Have a good flight for the rest of the trip.

S/C Roger.

Flight Hey 7 this is Houston Cap Com. Can you give us an account of what you actually saw during the attempt of GT-6 launch?

S/C . . garbled . .

Flight Roger. Can you again give us a short account of what you saw during GT-6 attempted launch?

S/C Roger. We were right over the Cape area. We saw everything go, ignition and everything. We were just photographing with the 16 mm and the 70 mm . . garbled.

Flight Roger, Jim.

S/C We were also performing D-4/D-7 at that time.

Flight Gemini 7 this is Houston.

S/C Go ahead Houston.

Flight Roger. The surgeon advises that your star lead Jim, is still a little bit noisy and if you get a change you might take a look at it.

S/C Roger. I'll look at it.

Flight And have you been receiving the LA Cleveland game on HF.

S/C Roger.

Flight Okay. Tananarive go local.

That was taped voice communication between Mission Control and the Tananarive tracking station, remoting - MCC remoting through Tananarive to command pilot Frank Borman. The reference - we had a visitor here in the Mission Control Center and the reference Short Biggie was Charles Conrad . This is Gemini Control at 196 hours and 9 minutes into the mission.

END OF TAPE

This is Gemini Control. We are 196 hours and 15 minutes into our mission, with spacecraft Gemini 7 now passing over - are moving out into the Pacific now and very shortly will come up on the Coastal Sentry tracking ship. We have a correction on our last broadcast. We reported that Donald Slayton was conversing with the crew over Tananarive, from the Mission Control Center here. However, the reference to the person talking as "short biggee" turned out to be little Pete Conrad who was not visible from this console and he really lived up to the name of "short biggee." We are expecting momentarily now to acquire the spacecraft Gemini 7 from the Coastal Sentry tracking ship and we are going to give you live conversation between the spacecraft crew and that tracking ship. Meantime, our Surgeon - our Flight Surgeon, advises us that the spacecraft crew is in very excellent condition, physically, and they do sound good, and our Flight Director tells us all systems are in good shape on the spacecraft. We have just picked up the spacecraft and let's listen in now to the live conversation.

FLIGHT CSQ Cap Com, Houston Flight.

CSQ Go ahead.

FLIGHT Chuck, did you say his fuel cell - his quantity read is in the fuel-cell H_2 position?

CSQ His quantity read switch is in the fuel-cell H_2 position. Before LOS I'll request that he go to ECS O_2.

FLIGHT Roger, got you.

CSQ I'm reading you with very high background noise, flight. Can barely copy.

FLIGHT Okay.

CSQ Uh, Gemini 7. I'd like to get an onboard readout of your propulsion quantity - propellant quantity - and RAMS source pressure.

S/C Uh, roger. Coming up.

Propellant quantity reads about 23 percent. .....(garbled)

... psi.

CSQ Say again pressure.

S/C 13 00 psi.

CSQ Roger, I copy.

We don't have any further information on the spacecraft 6 launch and we'll advise you tomorrow after your sleep period.

S/C Okay. How far out in the water is CSQ?

CSQ We're about halfway between Okinawa and Manila.

S/C Oh boy! You got any rough seas out there?

CSQ Oh, you bet. Must be a storm over us, I suppose, we're in rain squalls now.

S/C No. It's very cloudy. You got a good supply of dramamine?

CSQ Uh, yeah, we've had some.

S/C When you get to Hong Kong - good liberty!

CSQ Yeah, we'd like to. Maybe you could talk to flight about that. Believe I'll try to rush back for Christmas.

S/C Right. Were you able to get reservations finally?

CSQ Yeah, we've got confirmed reservations all the way back in.

S/C Good show.

FLIGHT What do you compute for 2 Charlie, CSQ? We have 3.7.

CSQ Stand by, flight.

Systems is watching the purge.

FLIGHT I'll get it after the pass.

CSQ Roger.

FLIGHT CSQ Cap Com. Houston Flight.

CSQ Go ahead.

FLIGHT Apparently the crew requested the "Rambling Rose" on HF. You can tell 'em it's on there now.

CSQ Uh, roger. Flight advises that you requested the "Rambling Rose" earlier. It's on UHF now. You copy it?

S/C We're trying it now.

CSQ Flight. 2 Charlie 3.1.

FLIGHT Roger.

CSQ Purge is complete flight. All systems are GO.

FLIGHT Roger, CSQ.

CSQ Gemini 7. We'd like to remind you to leave your quantity read switch in the ECS O_2 position for the sleep period.

S/C Roger. I'll get the hydrogen up to 510 then I'll switch over. "Rambling Rose" is no go.

CSQ ..... I copy.

FLIGHT Tell 'em that it'll get better.

CSQ I'll request that flight give you a re-play.

S/C Thank you.

CSQ Why don't you give 'em a re-play when they come over that area?

FLIGHT Wilco.

CSQ His ECS O_2 quantity is 71.8.

FLIGHT Okay. We - - -

CSQ H_2 quantity is 66.1.

FLIGHT Roger. Chuck, you can advise the crew that San Diego beat the Oilers 37 to 26.

CSQ Roger. Gemini 7. San Diego beat the Oilers 37 to 26.

S/C There's no joy ..... tonight.

CSQ That's affirmative. A bad note for your sleep period.

S/C Wait until next year!

CSQ Roger that.

We're approaching LOS. We'll say goodnight and I'll be talking to you tomorrow.

S/C Okay. Fine and dandy.

That was live voice communication between spacecraft Gemini 7 and the Coastal Sentry tracking ship. Our spacecraft.now on its 123rd revolution, is moving beyond the Coastal Sentry out over the Pacific and towards Hawaii. The flight plan now calls for a sleep period, and for the next 9 to 10 hours our pilots will at least be in a rest period, prior to falling asleep for the night, and our contact with the spacecraft will be only should an emergency arise. However, at this time all the spacecraft systems are in a GO condition, the crew is in excellent physical shape, and will settle down now for a long night. This is Gemini Control, 196 hours and 24 minutes into the flight.

END OF TAPE

This is Gemini Control. We are now 197 hours and 21 minutes into the flight of spacecraft Gemini 7. At this time our spacecraft is passing over South America and will shortly becoming up on the Tananarive tracking station. Our spacecraft crew is in a sleep period. We do not yet have a confirmation from the spacecraft telemetry that indicates they are asleep. And all we are getting from the spacecraft, of course, is spacecraft air-to-ground telemetry. We have not had any voice communication with the spacecraft entered their sleep period, approximately 1 hour ago. This is Gemini Control at 197 hours and 22 minutes into the mission.

END OF TAPE

This is Gemini Control. We are now 198 hours and 20 minutes into the flight of spacecraft Gemini 7. At this time the spacecraft is on its 124th revolution around the earth and is passing over the Pacific and the Hawaiian tracking station. We have had no voice communication with the spacecraft since the start of the flight crew sleep period. As yet we have no indication from the ground data readouts that the crew is asleep. Here in the Mission Control Center some of our flight controllers are taking advantage of this quiet period to get their evening meals, and work, then proceed on their report of the activities that took place today in this Mission Control Center. This is Gemini Control, 198 hours 20 minutes into the flight.

END OF TAPE

This is Gemini Control. We are now 199 hours and 20 minutes into the mission of spacecraft Gemini 7. At this time the spacecraft is on its 125 revolution over the earth and at the present time it is coming up towards the Coastal Sentry tracking ship. It is presently over Vietnam. A message by telemetry from the Rose Knot - a message by wire from the Rose Knot reading out the telemetry from the spacecraft. That message said, "The crew appears to be asleep." This is Gemini Control, at 199 hours and 20 minutes into the flight.

END OF TAPE

This is Gemini Control. We are now 200 hours and 20 minutes into the flight of spacecraft Gemini 7. At this time spacecraft Gemini 7 is passing over South America and will very shortly move on over the South Atlantic within the tracking range of the Rose Knot tracking ship. We have had no voice communications with the crew since the sleep period started this evening. According to our medical data the crew is asleep at this time. Here in the Control Center our white team of Flight controllers are working on their reports. Writing up the events of the day so that they can brief the blue team which is due to come on here and take over in approximately 1 hour. This is Gemini Control at 200 hours and 20 minutes into the flight.

END OF TAPE

This is Gemini Control Control. We are now 201 hours and 20 minutes into our mission. At this time our spacecraft Gemini 7 is passing over the Pacific and will be very shortly within the tracking range of the Canton Island tracking station. According to the latest ground data that we have, the crew is still asleep. Here in Mission Control Center, our Blue Team of flight controllers has appeared on the floor. Flight director, John Hodges, has been here for the past 40 minutes and is being briefed by outgoing flight director, Gene Kranz. The Blue Team will take over direction of this flight promptly in approximately 10 minutes. This is Gemini Control. We are 201 hours and 20 minutes into our mission. The crew is asleep.

END OF TAPE

This is Gemini Control, 203 hours and 20 minutes into the flight of Gemini 7. Seven is now in its 127th revolution around the earth and coming up on the west coast of South America. Over biomed data from Gemini 7 on the last pass over the Rose Knot and Coastal Sentry tracking ships, indicated that both crew members are asleep. Flight Surgeon Dr. Owen Coons reported that the crew has been asleep now for about 6 hours. All systems are reported as GO. The next station to acquire Gemini 7 will be the Canary Islands tracking station in about 25 minutes. With Gemini 7 now sweeping across the South Pacific, and just about to go into the 128th revolution at 203 hours and 21 minutes into the flight of Gemini 7, this is Gemini Control.

END OF TAPE

This is Gemini Control, 204 hours and 20 minutes into the flight of Gemini 7. Gemini 7 has just now come across the southern part of Asia and is heading down toward a pass across the South Pacific in its 128th revolution around the earth. The last station to acquire the 7 spacecraft was the Canary Islands. The data indicates that the Command Pilot was resting intermittently and the Pilot was apparently sleeping. Out next station to acquire the spacecraft will be Antigua in about 45 to 50 minutes. At 204 hours and 21 minutes into the flight of Gemini 7, this is Gemini Control.

END OF TAPE

This is Gemini Control, 205 hours and 20 minutes into the flight of Gemini 7. Gemini 7 is now just off the east coast of Africa in its 129th revolution around the earth. Over the Antigua station a few minutes back, all systems were reported as GO. The flight surgeon, here in mission control Dr. Owen Coons, reported that the pilot and the command pilot were both asleep. Gemini 7 is now over the Canary tracking station as it starts its pass - or will start its pass in about a minute or two across North Africa. We have some information on one of the experiments that's scheduled to be performed in the morning. The MSC-4 experiment in optical communication between Gemini 7 and the White Sands Missile Range, using the Laser beam is a very low probability of being performed tomorrow because of cloud cover. Tomorrow the flight plan now calls for the S-8/D-13 visual acuity test over Laredo, Texas to be the main experiment attempted on the state side pass. It will be in the 133 rd revolution tomorrow morning around 10:30 a.m. Central Standard Time, at a ground elapsed time of 112 hours. However, the whole pass is contingent on weather and weather is not too good in the area for either experiment tomorrow. Gemini 7 is now starting across North Africa in its 129th revolution. At 205 hours and 22 minutes this is Gemini Control.

END OF TAPE

This is Gemini Control, 206 hours and 20 minutes into the flight of Gemini 7. Gemini 7 is now making a pass across the South Pacific just south of Hawaii and the Canton tracking stations on its way up to the west coast of South America, in the 129th revolution around the earth. On the previous pass before the Carnarvon station which the spacecraft just went over, the Canary station indicated that the Command Pilot was intermittently rousing and the Pilot was resting. However, over the Carnarvon station, the - both crewmen appeared to be resting at the beginning of the pass, and then the Pilot began exercising after the pass had started. So, apparently both crewmen are awake now. The sleep period ended at 206 hours and 15 minutes into the flight, or about 5 minutes ago. The exercise and eat periods are now in progress and should be over in about an hour, according to the flight plan. Gemini 7 now starting across the South Pacific, 206 hours and 21 minutes into the flight. This is Gemini Control.

END OF TAPE

This is Gemini Control, 207 hours and 45 minutes into the flight of Gemini 7. Gemini 7 is now in the 130th revolution around the earth, just leaving the east coast of Australia on its way across the Pacific toward Central America. The pass over the Canary Islands a while back had so much background noise in it that we were unable to read it here. However, we did find out that the crew completed their fuel-cell purge at Canary and performed some inflight maintenance on the tape recorder by banging on it a couple of times. This apparently didn't help. So the onboard power circuit breaker for the tape recorder was turned off and the plans are now to leave the tape recorder off for one full rev. The recorder is located under the pilot's seat and James Lovell can reach it by reaching between his legs. We have a tape here of the pass over the Carnarvon tracking station and we'll play that tape for you now.

CRO Gemini 7, Carnarvon.

S/C Roger, Carnarvon.

CRO Roger. Welcome to Australia in the daylight.
We're standing by if you need us down here.
You're looking real good.

S/C Roger. We were just discussing that. We said we think we might be able to see Australia before it gets dark.

CRO Yeah, how much can you see?

S/C I'm picking it up right now, as a matter of fact. I think I see Shark's Bay, maybe.

CRO Roger, copy.

S/C Carnarvon. There's the last .....
..... (garbled)

CRO Flight, Carnarvon.

FLIGHT Go.

CRO We show no change whatsoever, we just got a readout on the stack currency. They're identical to what I gave you a few minutes ago.

FLIGHT Okay.

CRO ..... Flight.

Seven, Carnarvon.

S/C Go ahead, Carnarvon.

CRO Roger. We noticed your EKG tape is starting to get some static on it. We were wondering what kind of movement you had in the last couple seconds here.

S/C I leaned way over one time and started banging on the tape equipment down there in the footwell.

CRO Roger, copy.

END OF TAPE

This is Gemini Control, 207 hours and 20 minutes into the flight of Gemini 7. 7 is now making a pass across the Indian Ocean on its way toward the Carnarvon tracking station, where we are scheduled to have a S-8, Visual Acuity and a D-13, Astronaut Visibility experiment, along with the M-9 Vision Test experiment. These will be conducted during the pass over the Carnarvon station in Australia which is coming up in just a few minutes. The last report we had on the length of time it takes to make a revolution around the earth by Gemini 7 is 96.5 minutes. A little earlier this morning a problem developed with the onboard tape recorder. We had a state side pass with our first voice communication with the astronauts, the Gemini 7 crew this morning. We had that just a little while back and we will play that tape for you now.

Cap Com — Gemini 7, Houston.

S/C — Go ahead, Houston.

Cap Com — Good morning Gemini 7.

S/C — Hi there Houston.

Cap Com — Would you start your purge on section 1,please? . Gemini 7 Houston, could you tell me how difficult it is to get to your tape recorder?

S/C — Get to the tape recorder?

Cap Com — That's affirm.

S/C — Which one do you mean?

Cap Com — The TM tape. I'll tell you the problem. We've got a little problem in getting the tape rewound on it. Seems to have gone forward to the end of the tape and we can't rewind it.

We were wondering if you are in a position where you can knock it or anything like that. We have just about exhausted our means to try to get it to working.

S/C We have a bag over the top of it but we can kick it.

CapCom Can you kick it alright?

S/C Yea, we can kick it.

CapCom Why don't we wait perhaps until Canary and we'll give you some procedure over Canary. Gemini 7, Houston. Would you start purge on section 1 please?

S/C Roger, purge. Both sections don't you?

CapCom Let's just do section 1 right now. How was your night?

S/C Very good.

CapCom Were you tumbling at all when you awakened?

S/C Tumbling very slowly.

CapCom Very slowly, I see. Was the temperature all right in the cabin?

S/C Off in the morning but not too bad.

CapCom Okay. Gemini 7,Houston.

S/C Go

CapCom I request you open circuit stack 2C and not purge section 2 until the Canaries.

S/C Roger. Open circuit 2C and do not purge till the Canaries. Rog, will do as soon as . . garbled.

CapCom Okay, fine.

S/C . . garbled . .

CapCom I beg your pardon.

S/C Why do you want to open circuit 2C?

Cap Com It's dropping slightly in load sharing.

S/C Okay.

Cap Com I've got a flight plan update if you'd like to take it but if not we can wait until a little later.

S/C Why don't we wait. We are just in the middle of breakfast.

Cap Com Right O, be happy to.

S/C Seems like our mornings are getting earlier every day.

Cap Com We are finding that down here too. It's around 4:00 o'clock our time. It wasn't long ago that I couldn't talk to you at all. I'd like to give you the morning news but I really haven't heard any.

S/C Nothing new up here either. Complete purge on section 1 and 2C open circuited.

Cap Com Okay, thank you Gemini 7. Anything I can do for you all down here?

S/C How long do you want to leave this open circuited, Charlie?

Cap Com When we get to the Canaries we'll give you further instructions Frank.

S/C I've taken this bag off Charlie and I'll see what I can do for this TM tape recorder.

Cap Com We'd appreciate that Jim. If you can - if all else fails over the Canaries we'd like you to just kick at it a couple of times and see if we get any motion indicated down here.

S/C Okay.

CapCom Incidently I wouldn't be too concerned about the stack - stack 2C. Things don't look any different - any worse than they have before. No one is really unduly concerned about it down here. Gemini 7, Houston. Can you give us an open circuit voltage on 2C?

S/C Roger. 32 volts.

CapCom 32 volts. Thank you. I'll leave you alone now. Enjoy your breakfast.

S/C Right O.

END OF TAPE

This is Gemini Control, 208 hours and 20 minutes into the flight of Gemini 7. The Gemini 7 is now in its 131st revolution around the earth. A - they are now passing over the Caribbean Area on their stateside pass. The crew is being given a flight plan and a PLA update by spacecraft communicator Charlie Lindsett. Later on in this revolution the crew is scheduled to perform an S-5 Experiment, they're to take some Synoptic Terrain photographs over Africa. This will be followed by a crew status report over Carnarvon. At 208 minutes - 208 hours rather and 21 minutes into the flight of Gemini 7, this is Gemini Control.

END OF TAPE

This is Gemini Control, 208 hours and 57 minutes into the flight of Gemini 7. We are now in the 131st revolution around the earth. The Gemini 7 spacecraft is now passing over the Indian Ocean on its way toward the Carnarvon Tracking Station. We have a tape that was taped over the Canary Station a few minutes back and we will play that tape for you now.

Canary — Gemini 7, Canaries.

S/C — Roger Canaries.

Canary — Okay one little favor, would you close your tape recorder control circuit breaker.

S/C — Roger, it is closed.

Flight — Hey Jim, tell him why.

Canary — Okay, the reason for this being in the event that you may have to start your DCS circuit breaker, or your relays in your DCS system.

S/C — Roger. Gemini 7.

Canary — Go ahead.

S/C — Does this mean that you are getting only real time data and no delayed time.

Canary — Roger, affirmative. You didn't kick it hard enough.

S/C — Man, I tried. The Surgeon in Australia thought I had a heart failure.

Canary — We understand.

HOU — Cap Com Houston procedures.

Canary — Go ahead.

HOU — Could we have another main class 1. We got a bad timing on that last one.

Canary — Rog.

S/C Gemini 7.

Canary Go ahead 7.

S/C Could you give the time on the last nodal update they gave us. I think that something is wrong.

Canary Okay the time 208 07 39.

S/C Okay, how about the time for the S-5 sequence at 208 then.

Canary Okay, 208 52 00.

S/C Okay.

Canary You got a pleasant job up there or something?

S/C I didn't realize that Africa was almost as big as Texas I guess.

Canary Roger.

HOU Cap Com Houston procedures.

Canary Go ahead.

HOU We got another bad main. Could you send it again. We are getting a g.e.t. of 238 hours. It should be 208.

Canary Rog. We seem to be having computer problems right now.

HOU Roger.

Canary Rog.

HOU Will you get it.

Canary Rog.

AFD Canary Cap Com, AFD. You can tell him we checked that nodal update and the S-5 time and it looks correct.

Canary Okay. Gemini 7, Canary.

S/C Go ahead.

Canary Roger. We have rechecked that nodal update now for the S-5 and it sounds correct.

S/C Roger. My buddy didn't realize that Africa is so big.

Canary Rog, we copy.

S/C

END OF TAPE

This is Gemini Control. 209 hours and 20 minutes into the flight of Gemini 7. Gemini 7 is now in its 131 revolution around the Earth and is now leaving the east coast of Australia on its path across the Pacific Ocean toward the United States. We have a tape of a conversation between the Carnarvon Tracking Station and Spacecraft 7; and we'll play that tape for you now.

CRO Gemini 7, Carnarvon.

S/C Go ahead.

CRO Roger. We'd like for you to cycle your tape recorder to circuit breaker to the on position, please. This is the power circuit breaker.

S/C It's on.

CRO It's on, okay. Let's turn it on about..the tape run light..for about 3 seconds. Flight?

HOUSTON Go ahead.

CRO We had the tape run light on for approximately 3 seconds.

S/C ....crew status report?

CRO Roger. That's affirmative. We'd like a crew status report on the command pilot, please.

S/C Roger. You got my temperatures?

CRO We have a valid temperature. I'll hand you over to the Surgeon. Gemini 7, Carnarvon Surgeon. We have a valid temperature. We're standing by for your blook pressure.

S/C Here it comes.

CRO There's a fishtail.

HOUSTON Flight.

CRO Go ahead, Flight.

HOUSTON That was the same glitch we saw here. We think it's just a transient, and not really an indication of motion.

CRO Roger. I'm going to have him turn it off.

HOUSTON Okay.

CRO Gemini 7, Cap Com. Will you turn your tape recorder power circuit breaker to the off position now, please.

S/C Roger.

CRO Okay. We have a valid blood pressure.....

The telemetry tape recorder being off in no way affects the medical data being received on this flight by the Flight Surgeons here at Mission Control. There is, however, a loss of telemetry on spacecraft systems between stations. The Red Flight Controller Team is now coming on and being briefed by the night time Blue Team, and getting ready to take over for the day. Gemini 7 is now well on its way into the Pacific on its 131 revolution around the Earth at 209 hours and 22 minutes into its mission. This is Gemini Control.

END OF TAPE

Gemini Control here. Good morning. As we swung across the States last time, there was a lot of discussion. We have a taped conversation lasting some 9 minutes. Here it is.

GYM Gemini 7, this is Guaymas Cap Com.

S/C Go ahead Guaymas.

GYM Roger. Everything's go here on the ground. We'd like for yout to place your crossover switch to the on position.

S/C It's on.

GYM Roger.

HOUSTON Tell him we'll give him an explanation over this site.

GYM Houston will give you an explanation of this after you get over the States.

S/C Okay. Fine.

HOUSTON Texas, go remote.

TEXAS Texas is remote.

HOUSTON Guaymas, we're primed for voice now.

GYM Roge.

HOUSTON Gemini 7, Houston.

S/C Hi there, Houston.

HOUSTON Well, hi there to you also. We have a valid oral temp. Give us a blood pressure and stand by for the circuit.

S/C Roge.

HOUSTON You guys sound awful chiper this....You guys sound awful chiper this morning.

S/C We've been sleeping all the way around this pass.

HOUSTON Cuff is full scale. While we're getting that blood pressure, could you check your meal for dinner last night. We got day 14, meal A for breakfast this morning. We don't have a recording for dinner last night.

S/C Roger. Checking. Stand by. Day 13, meal C.

HOUSTON Roger. Copy, 13 C. Did you eat all of it?

S/C Roger. We both ate all of it.

HOUSTON Very good.

S/C We're good boys, Chuck.

HOUSTON I believe it. Okay. We've got a valid blood pressure down here. We're ready for exercise any time.

S/C Roge.

HOUSTON Cuff's full scale. Frank, while we're waiting for this pressure to bleed down, could we get a check on the total count on the water gun.

S/C 3207.

HOUSTON 3207, roger.

S/C Column 5 for me is 22, column 6 is 5. For Jim, it's column 5 is 22 and column 6 is 3.

HOUSTON 22 and 5 and 22 and 3

S/C Frank tells me..... I believe we have lost a little weight, Chuck.

HOUSTON You do...Can you tell it from looking at yourselves?

S/C Yes.

HOUSTON Valid blood pressure. How long's that beard right now, Frank?

S/C You'll have to talk to Jim. He's the bearded one.

HOUSTON Cap Com concurs that you've lost considerable weight. I think you down about 170 pounds.

S/C Roge. You'll are playing with our fuel cells again.

HOUSTON We're going to tell you about that. Frank, I've got two other quick questions here. On this sleep last night, we got that you both got about 5 to 6 hours of what you call medium sleep. Was that better than the night before?

S/C No. Not as good for me. And, not as good for Jim, either.

HOUSTON Not as good for you. Were you having thermal problems at all?

S/C Comfortable, but I just couldn't go to sleep.

HOUSTON What was the position of your suit flow control valve during the sleep periods?

S/C They're all just full flow and the temperature in here is just ideal. It's just like you were in an air conditioned home. Beautiful.

HOUSTON Frank, you said full warm, and that's the position now also?

S/C Roge. It's full flow, both valves. Chuck, did you get the blood pressure okay?

HOUSTON Roger. We got a valid blood pressure. We said that. I guess you didn't hear that when we were talking there. I'm sorry.

S/C You're just pulling my arm up here.

HOUSTON Gemini 7, Houston Flight.

S/C Yes, Sir.

HOUSTON I'll tell you a little bit about George Weber's newest theory. You ready?

S/C All set.

HOUSTON They think maybe the oxygen pressure coming out of the regulator into the fuel cell #2 is being blocked off possibly by the check valve. And, that as a result, they're not getting enough oxygen into fuel cell #2 which, besides the fact that it's not getting rid of the water, it's also not giving it enough oxygen to develop the power. So, we're going to run for a while with the crossover valve on and see if the increased oxygen flow to fuel cell 2 improves the performance.

S/C Very good. Number 2C is pretty far down, as you know.

HOUSTON Yea, we've been...uh...It was pretty steady until you woke up and it started dropping again. That's been its characteristic for about three days, so we thought we'd try something different.

S/C Fine.

HOUSTON How much water did you drink when you first woke up?

S/C Not too much. But, we filled up all the breakfast meal. I'll tell you exactly.

HOUSTON Yea. We think that may have some effect on the pressure in the fuel cell.

S/C Chris, we noticed that when we open circuited the fuel cell that 2C dropped about an amp. It never recovered.

HOUSTON Roger. Jim, are the M-1 cuffs still operating as they...and, are you wearing them?

S/C They're still operating. I've gotten quite used to them by this time. Chris, we took about 40 ounces right about breakfast time.

HOUSTON Roger. Gemini 7, we'd like to have you observe a couple of the Apollo landmarks on this rev, in preparation for your photography on the next rev. Specifically, 85 and 130. And, also check the 108 site for possible use later today.

S/C I don't want to use fuel for that Elliot. You mean just drift and look at them, right?

HOUSTON As best you can, right. You'll be....You're set up for a pass on them on the next rev after this one. We thought it would be a good idea to get a weather check this time so that we can scrub them if necessary so you don't even do it next time.

S/C Okay. Fine. Our fuel's down pretty low. Elliot, could you give us sort of a status report on how you plan to handle 6 and 7 now

if they go up Wednesday or Thursday and when and where we're going to re-enter and all that sort of stuff.

HOUSTON We don't have...I don't see what you mean on that 7. It wouldn't be any change in our plans. No change in that, Frank. We're still planning the same kind of flight, hoping to get off on Wednesday. And, that's what they're working towards. They do have some things that they don't fully understand about the launch vehicle that they want to check into; but they are pressing forward with a Wednesday launch, picking up an abbreviated mid-count tomorrow morning. Did you copy that, 7?

S/C Negative.

HOUSTON We do not have any change in our plans as far as the rendezvous and re-entry and so forth is concerned. Did you have a specific question there? I'm not sure I understand what you mean by that?

S/C Well, it appeared to me that we might both be coming in on the same day.

HOUSTON Negative. If they launch on Wednesday, they'll be back Thursday or Friday; and your day is Saturday.

S/C How much is our TR time?

HOUSTON You have 120 hours to go. Right mark.

S/C Okay. Thank you.

HOUSTON But, you are right. We are taking a look at the..what would happen if we had to launch and get you both down on the same day. And, right now, it looks like 205 and 207, with you coming down on 205.

S/C What time normal one, Chris. What time are you planning on bringing us down out of here if everything goes normal?

HOUSTON 207, and that was the GETRC that I gave you.

S/C Thank you.

HOUSTON Gemini 7, Houston. Your present GETRC would be 329:57:53.

S/C Roger. Thank you.

HOUSTON That's at 207-1.

S/C Righto. About 5 days left, 120 hours.

HOUSTON Essentially, I think the best way to look at it, Gemini 7, is that our plans have not changed from pre-flight planning in regard to the re-entry.

S/C Roger. That's fine. I just .....(Garbled).....

HOUSTON Roger.

S/C Elliot, this is Frank. Houston, this is Gemini 7.

HOUSTON Go ahead.

S/C This morning we picked up an Apollo landmark that was secured by weather yesterday while we were doing an S-5. It's Apollo 137. Would you check that off....(Garbled)...

HOUSTON Apollo 137, roger.

END OF TAPE

This is Gemini Control, Houston. 210 hours, 47 minutes into the flight. We've got three tapes backed up here. First, we'll hear the Canary conversation.

CAN Gemini 7, Canary.

S/C Go ahead Canary, Gemini 7.

CAN Roge. Looks like you've lost your Delta P light, huh?

S/C You're right.

CAN Okay. Tell you what we're going to do. We'd like you to leave that crossover switch on for a rev. And, we'd like you to monitor current and rollage, and try to give us a read out on what you observe, okay? If there's any variation at all?

S/C We were just discussing this. It's already jumped about an amp and a half since we put the crossover valve on.

CAN How about that.

S/C That's what we suggested doing about 8 days ago.

CAN I have no comment on that.

S/C I'll bet Flight does.

CAN I didn't hear anything.

HOUSTON Tell him we've had all kinds of suggestions.

CAN Flight says he's had all kind of suggestions.

S/C Ask him how his golf game went this weekend, will you?

CAN You just asked him. How'd it go, Flight?

HOUSTON The last time I played golf, I can't remember.

CAN Flight can't remember when he played golf last. How about that.

S/C Canary. Can you give me an update on the elapsed time, please?

AN Sure will. It's 210:06:55:67.

S/C Okay, Canary. Thank you. That last sequence time for S-5, you

know we were concerned about being a little late.

CAN Yep.

S/C It was late. That's the first time they've missed on that. We started early, though, and got the pictures.

CAN Okay. Very good. Flight, he's referring to the S-5 at 208:52:00.

HOUSTON Say again.

CAN He's referring to the S-5 at 208:52:00.

HOUSTON What about it.

CAN He said the time was late.

HOUSTON Roge. Send us an LOS main, Canary.

CAN Roger. Will do.

S/C Canary, the weather looks real good for Apollo 85 on the next pass.

CAN Okay. We copy it.

S/C Thank you.

HOUSTON Also, ask him to check weather in Apollo 108 if he can.

CAN Seven, Canary.

S/C Go ahead, please.

CAN Roge. Check Apollo 108 too, if you can, please.

S/C We will.

CAN Flight, Canary.

HOUSTON Go ahead.

CAN Right. On the flight, both our sections have just about balanced out in current. We're getting 7.91 on Section One and Section Two is 7.89.

HOUSTON Roge.

CAN Looks like both sections are just about carrying equal loads right now.

HOUSTON Roge.

HOUSTON Gemini 7, Houston. Surgeon says that your sternal lead is deteriorating on Jim there; and would like for you to replace it as discussed yesterday, if you can manage that at this time.

S/C Okay.

HOUSTON Thank you, Dr. Borman.

S/C I may want to get out my razor so I can shave him again. Operation beginning.

HOUSTON Should we send up a nurse?

S/C Tell Mr. Kraft as of right now, we can still go 15 days, if they need it.

HOUSTON Roger, 7.

KNO Kano loca. Kano LOS.

The last thing Frank Borman said in that transmission was, "Tell Mr. Kraft we can still go 15 days if he needs it." You recall before the mission, the Flight Director indicated the mission might be stretched; there seemed to be enough consumables aboard to go 15 days. We've heard no additional discussion of that point since the start of the mission; but if something would arrive at the Cape where we needed another 24 hours, it's conceivably possibably we'd go back and take another long look at it. The Tananarive tape is only Flight Controller discussions through that station. The 7 spacecraft was not raised it develops. However, we did have conversation over Carnarvon. And, here is that tape.

CRO Gemini 7, Carnarvon Cap Com. We have nothing for you this pass. We are standing by. Everything looks good from the ground.

S/C How is the pilot's sternal lead now?

HOUSTON We get a good here, Carnarvon.

CRO Roger. It's looking good. It's coming in real good.

S/C Thank you.

CAN Now, we've got to get that tape recorder running. Canary has LOS.

This is Gemini Control, Houston. That wrapped up the Canary conversation. As we're preparing to play the Kano conversation, let's take a look at some of clocks in the flight plan today. We're, right now, two-thirds of the way through Plan 7 Mission. We show 210, almost 211, hours elapsed time. Time to retro is about 119 hours. During this pass and the start of the next pass, we'll have a "go", "no go" over Texas for another 15 revs. And, that will be followed by a fuel cell purge between the Cape and Bermuda to be followed by a number of Apollo landmark photography exercises on down through Kano and well into Africa. We have now the Kano tape. We'll play it now.

S/C Roger. The weather here looks pretty good, Elliot. ..(Garble)..

HOUSTON Are you looking down to the southwest there, where you'll be next rev?

S/C Well, we can't really look anywhere. We just have to look the way the spacecraft's pointing; and every place it's pointing, it's good weather.

HOUSTON Roger. We're considering adding in a 108 on the next pass, which would be between Dakar and the 130 site, like Nyassa, or whatever it is there; but maybe if you get your attitude set up, you could hit all three of them fairly easy.

S/C Hello, Elliot. We ought to take more advantage of this; because once we get our attitude set up, it's no trouble taking more than one picture along our path.

HOUSTON Okay. We'll get you an update on that one.

S/C Elliot, did you copy that our update for S-5 was too late?

HOUSTON Roger. We're looking into that, Frank.

S/C Roger.

CRO Flight, that Delta P light is still off.

OUSTON Roger. That's on Section Two. E-Com tells me that, if you notice, the Section One Delta P light, we want to close the cross-over.

CRO Okay.

HOUSTON Would you pass that to the crew, also, Carnarvon.

CRO Roger. Gemini 7, Carnarvon. If the Section One Delta P light comes on, turn the crossover switch to the off position.

S/C Roger. Will do.

CRO Do we have any information on whether the spacecraft is tumbling or the approximate period of tumble if it is?

HOUSTON They said they haven't had any more trouble with tumbling.

CRO Roger. Thank you.

HOUSTON Why? Do you see some tumbling?

CRO Oh, we're noticing the slight change in signal strength which is indicative of a slow tumble rate.

HOUSTON Yea. Well, I'm sure they have some drifting rate.

CRO Roge.

HOUSTON And, they are drifting.

CRO Okay. Thank you.

END OF TAPE

This is Gemini Control Houston at 211 hours 21 minutes into the flight. Elliot See has just put in his first call to Gemini 7 which is now down over the West Coast of Mexico and we are going to have among other things a decision to go for a 148 rev flight during this pass. Let's cut in now on the conversation.

Cap Com — You have a TX coming up 7. Gemini 7, did you copy. We have a TX coming up.

S/C — Roger, copy. Haven't received it.

Cap Com — Roger, and you are go for 148-1.

S/C — Roger, go for 148-1. Do you want our systems check?

Cap Com — Roger, standing by.

S/C — The main batteries are all 22.8 except number 4 which is 22.5. Fuel cell stack readouts, 1A, 3.0; 1B, 3.0; 1C, 2.5; 2A, 2.0; 2B, 2.0; 2C, 4.0. Main bus voltage 27.2, RCS A 3000 psi, 80 degrees, RCS B 2900 psi, 79 degrees. Left hand secondary O_2 5400, right hand secondary O_2 5300.

Cap Com — Roger, copy. 7, can you confirm that the delta P lights have continued to stay out all this pass?

S/C — Roger, the delta P light has stayed out both in sections 1 and 2.

Cap Com — Roger. I have a flight plan update item for you when you are ready to copy.

S/C — Roger, stand by. We are ready to copy. Go ahead Houston.

Cap Com — First Jim, let me ask, do you recall approximately how long after you opened the crossover valve that the delta P light went out?

S/C — Stand by. We have a time on that. We think it was around 209 50.

Cap Com — 209 50, roger.

S/C About 210, correct us on that.

ap Com 210 00.

S/C Roger.

Cap Com Roger. Okay, first I would like to mention that the S-5 time that we had given you was incorrect. You were right on that. Flight Plan update item, Apollo 211 54 03, sequence 108, pitch 30 degrees down, yaw 5 degrees right. Also in the nature of flight plan update, but not exactly that type, we have some areas of weather interest that we would like you to observe and take pictures of if you can in drifting flight. We do not want you to use fuel for these. You can jot down the area. Frontal clouds northwest Florida, frontal clouds in New Mexico and Northern Mexico. Frontal clouds north and west of Hawaiian Islands. Do you copy.

/C Roger, and our number two delta P light just came back on.

Cap Com Roger, I copy. No. 2 delta P light back on.

S/C It was on at 22 11 25.

Cap Com Okay, we copied the delta P light, 7, and we got your time here on the ground. We are standing by for your fuel cell purge at this time.

S/C Starting purge.

Cap Com Roger.

S/C Houston, Gemini 7.

Cap Com Go.

S/C How do things look at the Cape on the recycle.

Cap Com Coming along real good.

S/C Very good.

Cap Com Still no report, Frank, on exactly what or how it happened, this plug coming out. They are still looking into it.

S/C Roger.

Cap Com Gemini 7. The movies indicate that plug coming out, but there is no evidence of why. It is clearly shown coming out, but that is about as far as we can get.

S/C Roger.

Cap Com 7, we are standing by for your O_2 section 2 purge.

S/C We are purging the section 2 O_2.

Cap Com Roger.

S/C Aren't you receiving it down there?

Cap Com Not at the moment.

S/C O_2 has been on for about a minute and a half now. Coming up on the second minute.

Cap Com Roger.

S/C Purge is complete but the crossover is still on.

Cap Com Roger 7.

S/C Houston, do you want us to keep the crossover on?

Cap Com Gemini 7, do you still have the delta P light?

S/C Roger.

Cap Com We would like to turn the crossover off for the time being.

S/C Crossover's off.

Cap Com Roger. We will continue to observe it and we will go back to that if we feel it is necessary. Jim, would you check fuel cell control number 2 circuit breaker, just verify that it is closed.

S/C You were right, fuel cell control was open.

Cap Com Jim, that means we will need to complete your section 2 purge, both hydrogen and oxygen.

S/C Roger, going through it again.

Cap Com Did that take care of the delta P light, also. Did the light go off when you put the crossover valve back on, Jim.

S/C Crossover is turned on and the delta P light is still on and we are purging oxygen at this time.

Cap Com Roger. Gemini 7, Houston. I presume you do not know any reason that that circuit breaker came out.

S/C Houston, 7.

Cap Com Go ahead.

S/C Purge complete, crossover off. I have no reason why it went out. I might have hit it inadvertently.

Cap Com You say you think you might have hit that circuit breaker open? Gemini 7, we suggest you just keep an eye on that circuit breaker there in case it did pop for some reason we would like to be aware of that.

S/C Roger, will do. And our crossover is now off and the light is still on.

Cap Com Roger 7.

AFD Canary Cap Com, AFD.

Canary AFD, Canary.

AFD Okay, we didn't leave the TM on you for this time.

Canary Okay.

AFD Okay, we are standing by. Any questions.

Canary No questions. How do you read.

AFD You are coming through loud and clear.

Canary Okay, very good.

Flight Canary Cap Com, Houston Flight.

Canary Go ahead.

Flight Would you check during your purge, the last purge that was

made over your site on fuel cell 2 to let us know that you did see it purge on the ground --

END OF TAPE

This is Gemini Control Houston and we're on the 133rd rev. Over the Canaries we had a brief conversation and it went like this.

CYI Gemini 7, Canary, how do you read?

S/C Rog, we're fine how are you?

CYI Roger, read you loud and clear. We'd like to check to see if you have your fuel cell heater on.

S/C Negative, do you want it on?

CYI No, negative.

S/C I had it on early this morning, Canary, but because it was giving me a minimum they gave me last night 445 but I haven't had it on for a while when it got up to 510.

CYI Okay, would you go to amperage and I'll give you a pressure purge?

S/C Pressure now is about 525.

CYI Roger, copy, 525.

S/C .....(garble)

CYI Go ahead.

S/C Apollo number 85 was obscured by clouds.

CYI Copy. Gemini 7, that's all we have for you here. Everything looks good on the ground. We'll see you tomorrow on rev 143.

S/C Roger, Canary, see you tomorrow.

CYI .....telemetry LOS.

HOU FLIGHT Roger, Canary, go take a swim.

CYI Thank you flight, will do.

Gemini Control here. We have an item of interest I believe to newsmen, both in Houston and the Cape. Bob Siegenthaler of ABC, the Gemini 7 TV pool producer, suffered a fractured right wrist and a fractured left knee cap yesterday while playing tennis late yesterday afternoon. Bob is in Methodist Hospital in Baytown. The weather today looks like this.-- the Weather Bureau Group here predicts satisfactory weather for the next two days for the flight of Gemini 7. In the Mid-Pacific landing area, they're predicting partly cloudy skies with widely scattered showers; easterly winds about 25 knots; seas ranging from up to eight feet; winds and seas are expected to deminish tomorrow.

In the western Pacific, skies will be partly cloudy; winds 10 to 15 knots; seas three to five feet;

In the eastern Atlantic, skies will be partly cloudy, winds easterly 12 to 15 knots, seas three to five feet.

Landing points in the northern portion of the primary landing zone -- in the western Atlantic, skies will be partly cloudy; winds easterly 10 to 15 knots; seas three to four feet.

In the southern portion of the zone -- broken cloudiness, scattered showers; easterly winds up to 20 to 25 knots; and seas six to eight feet.

For a Gemini 6 launch on Wednesday, the weather bureau people at the Cape are predicting partly cloudy skies and a ceiling of about 10,000 feet. The surface winds will be easterly and up to 10 knots.

Seas in the off shore area will be two to three feet and launch temperature will be about 62 degrees. This is Gemini Control Houston.

END OF TAPE

This is Gemini Control, Houston. In the swing across the Pacific, there was a very brief conversation with Canton Island. The pilots were advised to scrub the S-8/D-13 try at Larado this pass because of weather; and that was in a very distorted communication with heavy atmospherics apparently down there today. Then, at Hawaii, we had this conversation.

HAW Hawaii is TM solid.

HOUSTON Roger, Hawaii.

HAW Hawaii has C-Band track.

HOUSTON Roger, Hawaii.

HAW Gemini 7, Hawaii Cap Com.

S/C Right, Hawaii. Gemini 7.

HAW Roger. We show you go on the ground. How are things going this morning?

S/C Very good, thank you.

HAW We have nothing further for you. We are standing by.

S/C Okay, Hawaii. Thanks very much.

HAW Hawaii has C-Band LOS.

That wraps up the Hawaii tape. We've not yet established contact through Guaymas. When we get it, we'll come back to you.

END OF TAPE

This is Gemini Control Houston. Over Carnarvon a few minutes ago we had this conversation.

Carnarvon ... and the delta P light is on on section 2.

Flight Roger, delta P.

Carnarvon He just cycled series quantity read position.

Carnarvon Gemini 7, Carnarvon Cap Com. We have nothing further this psss, we are standing by.

S/C Roger Carnarvon. Will you inform Flight that the fuel cell control number 2 circuit breaker popped again after we re-set it over Houston.

Carnarvon Roger.

Flight Roger, we copied that. Can he give us a time.

S/C Standby, I'll give you a time.

Carnarvon Roger.

S/C 212 03.

Flight We copy.

Carnarvon Roger, Flight copies. Gemini 7, Carnarvon. Would you confirm that you have been exercising in the past few minutes, the Pilot.

S/C Roger, we've been asleep. Seriously, we were exercising.

Carnarvon Affirmative. Flight, everything looks good at Carnarvon.

Flight Say again.

Carnarvon Everything looks real good down here on the TM.

Flight Carnarvon, Houston Flight.

Carnarvon Go, Flight.

Flight Tell him we would like to leave that circuit breaker alone. If it is open, leave it open.

Carnarvon Okay, if it pops again, leave it open.

Flight Affirmative.

Carnarvon Gemini 7, Carnarvon Cap Com. Next time that that circuit breaker pops or if it pops again, you can leave it open.

S/C You want to reset it, we've left it open now.

Carnarvon Oh, you still have it open, okay, leave it where it is.

S/C Roger, we'll leave it open.

Flight Carnarvon, Houston Flight.

Carnarvon Roger, Flight.

Flight Tell them that we have found some interesting information out from the Cape with regard to the launch vehicle and that we will brief them on it later today on GLV-6.

Carnarvon They have found out some interesting information on the GLV-6 launch vehicle at the Cape, they will brief you on that a little later on today.

S/C Thank you.

Carnarvon Roger.

S/C Does it affect the launch on Wednesday?

Flight It means that the launch on Wednesday will probably come off as scheduled.

Carnarvon It means that the launch on Wednesday will probably come off on schedule.

S/C Thank you.

Carnarvon Roger.

Flight Also, at first look at this circuit breaker just means that they have to hold that circuit breaker on during a purge. We are looking at other aspects of the circuit breaker, but

it looks like it wouldn't hurt us too much except that they would have to hold it on to purge.

Carnarvon Okay. Carnarvon has had LOS.

END OF TAPE

This is Gemini Control in Houston. Elliot See has just raised Seven, now over the northwest area of Mexico. And, he's just started to talk to Frank Borman and Jim Lovell. Let's tune in there live.

HOUSTON ...factors. One is that the circuit breaker took approximately 30 minutes to re-open, which gives us a very good idea as to what the current drain might be there. And another is that there is not a continuous flow through that circuit breaker. If you've had your systems out, you've probably already seen this. It is used only for operating the purge valves and also for operating the section and stack power switches. So, we feel that we can operate under this condition without a limit. We will have to put the circuit breaker on for purging; and then we'll turn it off after that, and normally that would be the only need we would have for it. But, even if we would need to use it for section or stack power switches, we could also turn it on and then turn it off afterward. Any comments from you on that?

S/C No. As you say, we've been through the systems; but, we came to the same conclusion.

HOUSTON Roger. We're continuing to analyze it, and we'll keep you posted on that.

S/C Thank you.

HOUSTON I have some flight plan updates when you're ready to copy. Incidentally, in the systems book, if you haven't done so already, be sure and look at both drawings, 121 as well as 122; because there are some circuits shown on 121 that are not shown on 122.

S/C Roger. We're ready to copy.

HOUSTON Mode 214:08:42, rev. 134 154.3 degrees east. Right ascension 092443. Transponder test. 214:31:00, sequence 01. Transponder on. Time 215:29:00, purge fuel cells at Carnarvon. HF test. 215:53:00,

sequence 02, begin test. Horizon scan mode. Time 215:00:00. Bio-med recorder #1 to continuous. MSC 2 and 3, 216:27:00. Sequence 03, stop at 216:37:00. Real time TM. Do you copy?

S/C Roger. I copied all but the one right after the radar test.

HOUSTON Right after the transponder test?

S/C Right.

HOUSTON What part did you miss? There was a time and a purge fuel cells.

S/C Okay. I missed the time.

HOUSTON 215:29:00. Purge fuel cells at Carnarvon.

S/C Okay. We have them all, Elliot.

HOUSTON HF test 217:23:00. Sequence 02. That's an off time. That's the off time for the test that was started at 215:53.

S/C Right.

HOUSTON Time 217:29:00, crew status report on the pilot at Hawaii. Time 218:00:00, Bio-med recorder #1 off. 218:03:00, crew status report, command pilot, at RKV. 218:47:00, flight plan report at the CSQ. 219:39:00, fuel cell purge and PLA update at RKV. Do you copy so far?

S/C Roger.

HOUSTON 220:10:00, Bio-med recorder #2 continuous. 230:10:00, Bio-med recorder #2 off. Do you copy?

S/C We have it.

HOUSTON Roger. Have the days news report from the Haney News Service. Are you ready?

S/C Ready.

HOUSTON There was a big management change announcement for the Houston Astros today. Paul Richards has been relieved as General Manager,

and Grady Hatton will be the new Field Manager. I understand he's coming from a Pacific Coast team that's had a very good record out there. Other people involved: Eddie Robinson and Luman Harris are going to be offered other positions in the Astro Organization. The Soviet News Agency, Sunday, finally got around to confirming the fact that 2 cosmonauts became ill during the Vostok 1 flight in October 1964. These were the two non-pilots, and they had a reaction of the seasickness type. And, among other things, they suffered from illusions. There's heavy coverage in the newspapers and on T.V. of the Gemini 6 attempt yesterday; and, also, it's being noted widely that you two now hold the space endurance record and are increasing it daily. Have a good lunch, 7. We'll see you the next time around.

S/C Roger.

HOUSTON Incidentally, we looked into trying to substitute an MSC 4 on this pass; but the weather there is also bad.

S/C Roger. Houston, Carnarvon said you'd have some word on the cause of 6's...

HOUSTON We don't have that ready for you yet, 7. We'll let you know as soon as we do.

S/C Roger.

HOUSTON Seven, Dr. Berry would like to pass along his thanks for your work on the sternal lead.

S/C Roger. Anything for in-flight maintenance.

HOUSTON Still coming through real good, Jim. Gemini 7, we had the HF cut out there for a while making some circuit checks. It's back up now, if you're interested.

S/C That's outstanding, Elliot.

This is Gemini Control. Apparently, Elliot See is going to let the crew go ahead with their lunch, and have no additional conversation. The comment or two on some of the records that are being established, you heard Elliot make reference to that on one of the news accounts, the individual manned space record time of endurance is held, of course by Gordon Cooper. That total for Cooper is 225 hours, 15 minutes. Both Borman and Lovell will pass that record in approximately 12 hours, a little later today. The total U.S. manned spacecraft time prior to Gemini 7 was 347 hours, 39 minutes. Now, by adding the total time accumulated thus far in this mission, 213 hours, plus we have a total U.S. spacecraft time of 560 hours. The total Soviet manned spacecraft time is 432 hours, 40 minutes. The total U.S. individual man hours, accumulative total of all the pilots who have flown in space for the U.S., prior to Gemini 7, was 641 hours, 26 minutes. The total Russian man hours in space is 507 hours, 16 minutes. Now, by adding the total accumulated in 7 to that 641 U.S. total, we come up with 1066 hours, which is slightly more than double the total Russian time, man time in space. At 213 hours, 12 minutes into the mission, this is Gemini Control in Houston.

END OF TAPE